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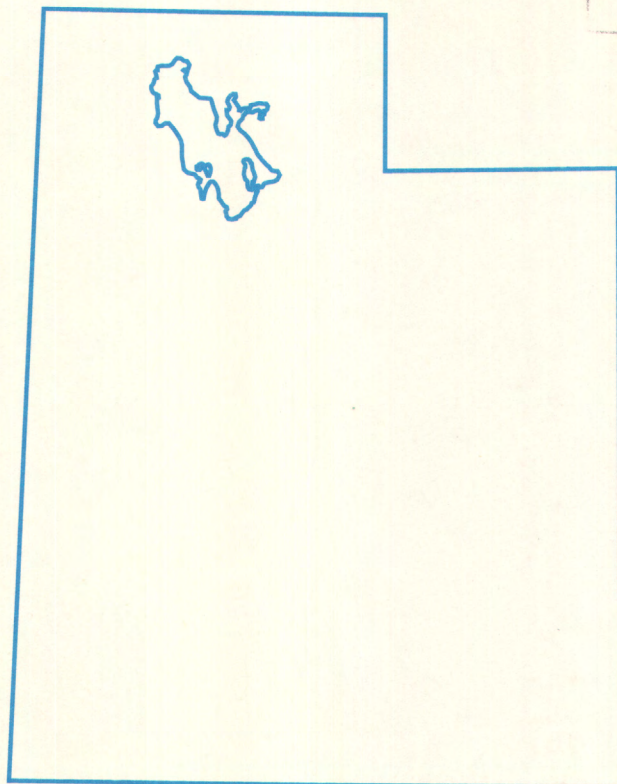


# Water Resources Data Utah Water Year 1993

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Prepared in cooperation with the State of Utah  
and with other agencies



# CALENDAR FOR WATER YEAR 1993

1992

OCTOBER							NOVEMBER							DECEMBER						
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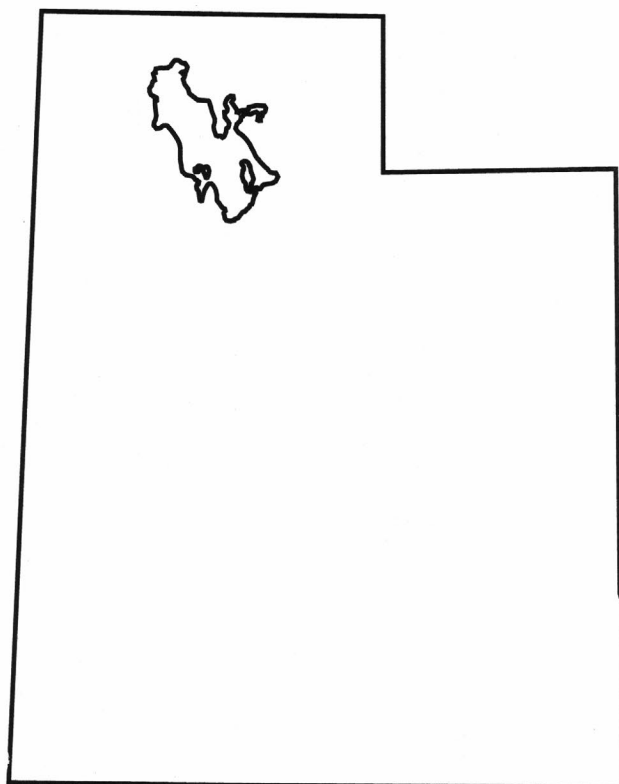
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# Water Resources Data Utah Water Year 1993

by M.D. ReMillard, L.R. Herbert, G.A. Birdwell, and T.K. Lockner



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT UT-93-1  
Prepared in cooperation with the State of Utah  
and with other agencies



UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

Gordon Eaton, Director

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Salt Lake City, Utah 84104

1994



#### PREFACE

This volume of the annual hydrologic data report of Utah is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Utah are contained in one volume.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the State of Utah and with other agencies under the general supervision of H. L. Case III, District Chief, Utah.





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v1 SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

[Letter after station name designates type of data: (d) discharge, (e) elevation or contents,  
(c) chemical, (b) biological, (t) water temperature, (s) sediment.]

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Oak Creek above Little Creek, near Oak City (d) . . . . .	10224100	300
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Coal Creek near Cedar City (d) . . . . .	10242000	305



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BEAVER COUNTY									
Well	382551112555101	Local	number	(C-27-10)	25cbd-	1	.	.	310
Well	382020112585901	Local	number	(C-28-10)	28ccd-	1	.	.	310
BOX ELDER COUNTY									
Well	414236112101201	Local	number	(B-11-	3)10abb-	4	.	.	310
Well	414411112543701	Local	number	(B-12-	9)30cda-	1	.	.	310
Well	415703112514501	Local	number	(B-14-	9)9add-	1	.	.	311
IRON COUNTY									
Well	375241112471001	Local	number	(C-34-	8)5bca-	1	.	.	311
Well	374252113391801	Local	number	(C-35-16)	33bcc-	1	.	.	311
Well	373735113393801	Local	number	(C-36-16)	29daa-	1	.	.	311
JUAB COUNTY									
Well	395259113430401	Local	number	(C-11-17)	12cbb-	1	.	.	312
Well	393143111523301	Local	number	(C-15-	1)12aba-	1	.	.	312
KANE COUNTY									
Well	370901112335001	Local	number	(C-42-	6)18cca-	1	.	.	312
Well	370523112334702	Local	number	(C-42-	6)30dcc-	2	.	.	312
MILLARD COUNTY									
Well	393046112231301	Local	number	(C-15-	5)15dad-	1	.	.	313
Well	393020112362201	Local	number	(C-15-	7)23bac-	1	.	.	313
Well	385844112245801	Local	number	(C-21-	5)21aba-	1	.	.	313
Well	384906112330601	Local	number	(C-23-	6)17baa-	1	.	.	313
SALT LAKE COUNTY									
Well	403916111575901	Local	number	(C- 2-	1)9ccc-	1	.	.	314
Well	403452111484301	Local	number	(D- 3-	1)2ccc-	1	.	.	314
SAN JUAN COUNTY									
Well	375243109191301	Local	number	(D-33-24)	30dab-	1	.	.	314
Well	373830109283201	Local	number	(D-36-22)	22daa-	1	.	.	314
TOOELE COUNTY									
Well	405028113362001	Local	number	(B- 1-15)	7cab-	1	.	.	315
Well	405028113362102	Local	number	(B- 1-15)	7cab-	2	.	.	315
Well	405028113362101	Local	number	(B- 1-15)	7cab-	3	.	.	315
Well	405028113361901	Local	number	(B- 1-15)	7cab-	4	.	.	315
Well	405028113361902	Local	number	(B- 1-15)	7cab-	5	.	.	315
Well	405028113361903	Local	number	(B- 1-15)	7cab-	6	.	.	316
Well	405028113362501	Local	number	(B- 1-15)	7cba-	1	.	.	316
Well	405028113362401	Local	number	(B- 1-15)	7cba-	2	.	.	316
Well	405028113362502	Local	number	(B- 1-15)	7cba-	3	.	.	316
Well	404408113283201	Local	number	(C- 1-14)	18bad-	1	.	.	316
Well	404408113283101	Local	number	(C- 1-14)	18bad-	2	.	.	317
Well	404407113283101	Local	number	(C- 1-14)	18bad-	3	.	.	317
Well	404522113344901	Local	number	(C- 1-15)	7add-	1	.	.	317
Well	404523113344801	Local	number	(C- 1-15)	7add-	2	.	.	317
Well	404523113344802	Local	number	(C- 1-15)	7add-	3	.	.	317
Well	404523113344701	Local	number	(C- 1-15)	7add-	4	.	.	318
Well	404523113344702	Local	number	(C- 1-15)	7add-	5	.	.	318
Well	404523113344703	Local	number	(C- 1-15)	7add-	6	.	.	318
Well	401312112442301	Local	number	(C- 7-	8)10cbd-	1	.	.	318
UINTAH COUNTY									
Well	403158109372201	Local	number	(D- 3-20)	25abc-	2	.	.	319
UTAH COUNTY									
Well	401818112014501	Local	number	(C- 6-	2)14aba-	1	.	.	319
Well	402333111513401	Local	number	(D- 5-	1)8dcc-	1	.	.	319
WASHINGTON COUNTY									
Well	370231113320301	Local	number	(C-43-15)	16dac-	1	.	.	319
WEBER COUNTY									
Well	411544111461001	Local	number	(A- 6-	2)18bad-	1	.	.	320
Well	411348112013601	Local	number	(B- 6-	2)26ada-	1	.	.	320

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## WATER RESOURCES DATA FOR UTAH, 1993

## DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water gaging stations in Utah and parts of surrounding states have been discontinued. Daily streamflow (d) and reservoir elevation (e) records were collected and published for the period of record, expressed in water years. Discontinued project stations with less than 2 years of data have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

Station name	Station number	Drainage area (sq mi)	Period of record
COLORADO RIVER BASIN			
Cottonwood Wash at I-70 near Cisco, Ut (d)	09163675	170	1983-86
Twomile Creek near LaSal, Ut (d)	09169000	269	1944-51
Taylor Creek near Gateway, Colorado (d)	09177500	12	1944-67
Deep Creek near Paradox, Colorado (d)	09178000	---	1944-53
TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER			
Geyser Creek near Paradox, Colorado (d)	09178500	---	1944-51
Onion Creek above Onion Creek Bridge near Moab, Ut (d)	09180920	---	1979-81
Onion Creek below Onion Creek Bridge near Moab, Ut (d)	09180970	---	1979-81
Onion Creek near Moab, Ut (d)	09181000	18.8	1950-55
Professor (Rock) Creek near Moab, Ut (d)	09181500	33.6	1950-53
Castle Creek above diversions, near Moab, Ut (d)	09182000	7.58	1951-55
Castle Creek near Moab, Ut (d)	09182500	53.1	1950-55
Courthouse Wash at Arches Hwy Crossing near Moab, Ut (d)	09182900	143	1957-58
Courthouse Wash near Moab, Ut (d)	09183000	162	1959-66
Pack Creek at M4 Ranch, near Moab, Ut (d)	09184500	15.8	1950-55
Pack Creek near Moab, Ut (d)	09185000	57.4	1955-59
Hatch Wash near LaSal, Ut (d)	09185500	378	1951-71
Indian Creek Tunnel near Monticello, Ut (d)	09185800	---	1958-80
Indian Creek near Monticello, Ut (d)	09186000	4.70	1950-57
Indian Creek above Cottonwood Creek near Monticello, Ut (d)	09186500	31.2	1949-71
Cottonwood Creek near Monticello, Ut (d)	09187000	115	1988-91
Indian Creek above Harts Draw near Monticello, Ut (d)	09187500	258	1950-57
Indian Creek below Bogus Pocket near Monticello, Ut (d)	09187550	262	1949-57
GREEN RIVER BASIN			
Blacks Fork above Blacks Fork Ranger Station, Ut (d)	09217500	48.8	1937-39
Blacks Fork (at Ranger St) near Robertson, Wy (d)	09217900	126	1937-39
Blacks Fork at Blacks Fork Ranger Station, Ut (d)	09218000	a130	1966-86
Green River near Linwood, Ut (d)	09225500	a14,300	1937-39
Middle Fork Beaver Creek near Lonetree, Wy (d)	09226500	a28	1928-63
East Fork Beaver Creek near Lonetree, Wy (d)	09227000	a8.2	1948-70
West Fork Beaver Creek near Lonetree, Wy (d)	09227500	a23	1949-62
Burnt Fork near Burnt Fork, Wy (d)	09228500	52.8	1943-83
Green River at Flaming Gorge near Linwood, Ut (d)	09230500	a14,900	1923-38
Sheep Creek Upper Canal near Manila, Ut (d)	09231000	---	1950-61
Carter Creek Canal near Manila, Ut (d)	09231200	---	1956-61
Sheep Creek Lower Canal near Manila, Ut (d)	09231500	---	1950-61
Sheep Creek near Manila, Ut (d)	09232000	a42	1943-61
Sheep Creek at mouth near Manila, Ut (d)	09232500	111	1947-61
Carter Creek near Manila, Ut (d)	09233000	a19	1949-54
Red Lake Outlet near Manila, Ut (d)	09233500	a19	1946-49
Carter Creek at mouth near Manila, Ut (d)	09234000	a110	1946-55
Red Creek near Dutch John, Ut (d)	09234700	140	1971-76
Green River at (near) Bridgeport, Ut (d)	09235000	a15,700	1912-15
Crouse Creek near Vernal, Ut (d)	09235100	30.2	1986-90
Pot Creek near Vernal, Ut (d)	09235800	107	1958-82
Jones Hole Creek near Jensen, Ut (d)	09260500	a120	1950-56
ASHLEY CREEK BASIN			
Brush Creek above cave near Vernal, Ut (d)	09261500	a23	1946-55
Big Brush Creek near Vernal, Ut (d)	09262000	79.6	1940-79
Lt Brush Creek below East Pk Res near Vernal, Ut (d)	09262500	a20	1949-55
Little Brush Creek near Vernal, Ut (d)	09263000	a28	1946-52
Brush Creek near Jensen, Ut (d)	09263500	255	1940-65
Ashley Creek below Trout Creek near Vernal, Ut (d)	09264000	a27	1944-54
South Fork Ashley Creek near Vernal, Ut (d)	09264500	a20	1944-55
Oaks Park Canal near Vernal, Ut (d)	09265000	---	1946-69
Ashley Creek above Red Pine Creek near Vernal, Ut (d)	09265300	55.8	1965-75
Ashley Creek above Spring near Vernal, Ut (d)	09265500	a100	1941-45
Ashley Creek Spring near Vernal, Ut (d)	09266000	---	1944-45
U P & L Co.'s Tailrace near Vernal, Ut (d)	09267000	---	1954-55
Ashley Creek above Dry Fork, near Vernal, Ut (d)	09267100	110	1917
Dry Fork above sinks, near Dry Fork, Ut (d)	09268000	44.4	1920-31
North Fork of Dry Fork near Dry Fork, Ut (d)	09268500	8.62	1959-72
Brownie Canyon above sinks, near Dry Fork, Ut (d)	09268900	8.24	1940-75
East Fork of Dry Fork near Dry Fork, Ut (d)	09269000	a12	1947-89
Dry Fork of Dry Fork at mouth near Dry Fork (d)	09269500	a18	1961-89
Dry Fork below springs near Dry Fork, Ut (d)	09270000	97.4	1947-63
Dry Fork at mouth near Dry Fork, Ut (d)	09270500	116	1950-52
Ashley Creek at Sign of the Maine, near Vernal, Ut (d)	09271000	241	1904
Highline Canal below Mantle Gulch near Jensen, Ut (d)	09271070	---	1941-45
Steinaker Reservoir near Vernal, Ut (e)	09271300	---	1954-69
River Irrigation Company Canal near Jensen, Ut (d)	09271470	---	1959-72
Ashley Creek near Jensen, Ut (d)	09271500	383	1900-04

## DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record
TRIBUTARIES BETWEEN ASHLEY CREEK AND DUCHESNE RIVER			
Halfway Hollow Tributary near LaPoint, Ut (d)	09271800	a5.6	1960-74
DUCHESNE RIVER BASIN			
Duchesne Tunnel near Kamas, Ut (d)	09272500	---	1954-69
Duchesne River at Provo River Trail near Hanna, Ut (d)	09273000	a39	1930-33 1935-54
Duchesne River below Little Deer Creek, near Hanna, Ut (d)	09273200	a39	1965-68
Hades Creek near Hanna, Ut (d)	09273500	a75	1950-68
Duchesne River (North Fork) near Hanna, Ut (d)	09274000	a78	1922-23 1929-30 1946-63 1950-68
West Fork Duchesne River below Dry Hollow near Hanna, Ut (d)	09275000	43.8	1974-81
Wolf Creek above Rhoades Canyon near Hanna, Ut (d)	09276000	10.6	1946-84
Wolf Creek near Hanna, Ut	09276500	a19	1922-23
Duchesne River at Hanna, Ut (d)	09277000	a230	1953-61
Com Fl Duchesne Riv & Duchesne Tun near Tabiona (d)	09277501	---	1919-67
South Fork Rock Creek near Hanna, Ut (d)	09278000	15.7	1953-92
Rock Creek near Hanna, Ut (d)	09278500	122	1950-69 1974-88
Rock Creek below Miners Gulch near Hanna, Ut (d)	09278700	133	1974-81
Duchesne River at Duchesne, Ut (d)	09279500	a660	1918-70
Strawberry River and Willow Creek Ditches near Heber, Ut (d)	09280000	---	1950-60
Hobble Creek at Daniels Summit near Wallsburg, Ut (d)	09280400	2.89	1964-84
Upper Hobble Creek Ditch near Heber, Ut (d)	09280500	---	1950-52
Lower Hobble Creek Ditch near Heber, Ut (d)	09281000	---	1950-52
Hobble Creek Ditch (Upper & Lower) near Heber, Ut (d)	09281500	---	1949-60
Strawberry Tunnel at West Portal near Thistle, Ut (d)	09282000	---	1915-25 1932-34 1935-68
Strawberry Reservoir near Soldier Springs, Ut (e)	09282500	170	1913-68
Indian Creek in Strawberry Valley, Ut (d)	09284000	a50	1905-06 1909-10
Strawberry River below mouth of Indian Creek, Strawberry Valley, Ut (d)	09284500	182	1903-06 1909
Willow Creek near Soldier Springs, Ut (d)	09285500	a44	1943-47
Strawberry River above Red Creek near Fruitland, Ut (d)	09285700	363	1964-81
Red Creek near Fruitland, Ut (d)	09286500	a89	1918-22 1956-61
Currant Creek below Red Ledge Hollow near Fruitland, Ut (d)	09287000	50.1	1946-68 1974-83
Water Hollow near Fruitland, Ut (d)	09287500	a14	1946-84
Red Creek below Currant Creek near Fruitland, Ut (d)	09288100	297	1964-81
West Fork Avintaquin Creek near Fruitland, Ut (d)	09288150	56.1	1964-86
Strawberry River at Duchesne (Theodore), Ut (d)	09288500	1,066	1908-10 1915-68
Sowers Creek near Duchesne, Ut (d)	09288900	40.6	1964-86
Antelope Creek near Myton, Ut (d)	09289000	a198	1918-21
Brown Duck Creek near Mountain Home, Ut (d)	09290000	a15	1933-34 1943-55
Lake Fork River below Taskeech Damsite near Mt Home, Ut (d)	09291200	138	1977-84
Yellowstone Creek below Swift Creek near Altonah, Ut (d)	09291500	a99	1950-55
Yellowstone River at mouth near Altonah, Ut (d)	09293000	142	1943-44 1976-81
Lake Fork River (below Forks) near Altonah, Ut (d)	09293500	304	1904 1907-10 1917-20
Lake Fork River at Hwy 87 near Altamont, Ut (d)	09293600	318	1976-81
Pigeon Water Creek near Altamont, Ut (d)	09293700	95.5	1976-79
Lake Fork River near Upalco, Ut (d)	09294000	427	1943-55 1976-81
Lake Fork (Creek) near Myton, Ut (d)	09294500	484	1900-03 1907-36 1976-81
Uinta River below Gilbert Creek near Neola, Ut (d)	09295500	a33	1951-55
Uinta River above Clover Creek near Neola, Ut (d)	09296000	132	1946-55
Clover Creek near Neola, Ut (d)	09296500	a9.5	1950-55
Uinta River near Neola, Ut (d)	09297000	163	1922-27 1930-83
Uinta River near Whiterocks, Ut (d)	09297500	218	1899-1903 1907-10 1917-20
West Channel Uinta River below diversion works near Whiterocks, Ut (d)	09297600	216	1976-81
East Channel Uinta River below diversion works near Whiterocks, Ut (d)	09297700	215	1977-81
East Channel Uinta River at County Road Bridge near Whiterocks, Ut (d)	09297800	253	1976-81
East Channel Uinta River at LaPoint Road near LaPoint, Ut (d)	09297900	382	1976-82
Farm Creek near Whiterocks, Ut (d)	09298000	14.9	1950-81
Whiterocks River above Paradise Creek near Whiterocks, Ut (d)	09298500	a90	1946-55
Paradise Creek near Whiterocks, Ut (d)	09299000	a10	1946-55
Whiterocks River below dams site near Whiterocks, Ut (d)	09299400	110	1976-81
Whiterocks River below Farm Creek Canal near Whiterocks, Ut (d)	09299600	120	1976-81
Whiterocks River 1 Mile East of Whiterocks, Ut (d)	09299700	124	1976-81
Deep Creek at State Hwy 246 near LaPoint, Ut (d)	09299900	72.2	1976-79
Deep Creek near LaPoint, Ut (d)	09300000	a75	1943-45 1950-55
Uinta River at Fort Duchesne, Ut (d)	09300500	557	1899-1904 1907-10 1917-20 1943-58 1976-81
Dry Gulch near Neola, Ut (d)	09301000	a67	1951-58
Dry Gulch near Fort Duchesne, Ut (d)	09301200	469	1976-81
Uinta River at Randlett, Ut (d)	09301500	1,064	1899-1904 1976-81



Station name	Station number	Drainage area (sq mi)	Period of record
WHITE RIVER BASIN			
White River near Colorado State Line, Ut (d)	09306395	3,680	1977-86
White River above Hells Hole Canyon near Watson, Ut (d)	09306400	a3,700	1974-76
Hells Hole Canyon Creek at mouth near Watson, Ut (d)	09306405	24.5	1975-83
Evacuation Creek above Missouri Creek near Dragon, Ut (d)	09306410	100	1975-83
Evacuation Creek below Park Canyon near Watson, Ut (d)	09306415	246	1975-76
Thimble Rock Canyon near Watson, Ut (d)	09306417	1.7	1975-76
Evacuation Creek at Watson, Ut (d)	09306420	259	1975-75
Evacuation Creek Tributary near Watson, Ut (d)	09306425	12.4	1974-76
Evacuation Creek near mouth near Watson, Ut (d)	09306430	284	1975-81
White River below Southam Canyon near Watson, Ut (d)	09306600	a4,030	1975-76
Southam Canyon Wash near Watson, Ut (d)	09306605	2.5	1974-76
Southam Canyon Wash at mouth near Watson, Ut (d)	09306610	8.3	1974-76
Asphalt Wash below Center Fork near Watson, Ut (d)	09306620	94.4	1975-76
Asphalt Wash near mouth near Watson, Ut (d)	09306625	97.5	1974-83
White River below Asphalt Wash near Watson, Ut (d)	09306700	a4,130	1974-77
Bitter Creek above Dick Canyon near Watson, Ut (d)	09306740	11.7	1975-78
Sweetwater Canyon below South Canyon near Watson, Ut (d)	09306760	22.6	1975-78
Sweetwater Canyon Creek near mouth near Watson, Ut (d)	09306780	124	1975-78
Bitter Creek near Bonanza, Ut (d)	09306800	324	1971-89
Bitter Creek at mouth near Bonanza, Ut (d)	09306850	398	1975-83
Sand Wash near Ouray, Ut (d)	09306870	59.7	1975-81
Sand Wash at mouth near Ouray, Ut (d)	09306872	71.1	1977-81
Coyote Wash near mouth near Ouray, Ut (d)	09306878	228	1977-83
North Wash near Ouray, Ut (d)	09306880	11.0	1980-81
Cottonwood Wash near mouth near Ouray, Ut (d)	09306885	70.6	1977-81
White River at mouth near Ouray, Ut (d)	09306900	5,120	1974-86
TRIBUTARIES BETWEEN DUCHESNE RIVER AND PRICE RIVER			
Green River near Ouray, Ut (d)	09307000	a35,500	1948-66
Pariette Draw near Ouray, Ut (d)	09307200	153	1976-84
Combined Flow Pariette Draw at mouth and Lambs Div (d)	09307290	---	1978-80
Lamb Diversion from Pariette Draw near Ouray, Ut (d)	09307295	---	1978-82
Pariette Draw at mouth near Ouray, Ut (d)	09307300	298	1975-84
Willow Creek above diversions near Ouray, Ut (d)	09307500	297	1951-55 1958-70 1975-83
Hill Creek above Towave Reservoir near Ouray, Ut (d)	09307800	89.7	1975-81
Hill Creek near mouth near Ouray, Ut (d)	09307900	288	1975-81
Willow Creek near Ouray, Ut (d)	09308000	897	1948-55 1975-83
Minnie Maud Creek near Myton, Ut (d)	09308500	32.0	1950-55 1957-89
Minnie Maud Creek at Nutter Ranch near Myton, Ut (d)	09309000	231	1948-55
PRICE RIVER BASIN			
Fairview Ditch near Fairview, Ut (d)	09309500	---	1950-65
Gooseberry Creek near Fairview, Ut (d)	09309800	a7,51	1960-69
Boardinghouse Creek at mouth near Scofield (d)	09310575	2.04	1983-84
Eccles Canyon near Scofield, Ut (d)	09310600	5.5	1980-84
Price River near Scofield, Ut (d)	09311500	a155	1918-21 1925-31 1939-69 1979-80 1962-63 1962-63
Price River near Soldier Summit, Ut (d)	09311700	a180	1962-63
North Fork White River near Soldier Summit, Ut (d)	09312000	23.3	1942-47
White River near Soldier Summit, Ut (d)	09312500	52.8	1938-67
Beaver Creek near Soldier Summit, Ut (d)	09312700	26.1	1961-89
Willow Creek near Castle Gate, Ut (d)	09312800	62.8	1963-89
Willow Creek at Castle Gate, Ut (d)	09312900	77.4	1980-81
Spring Canyon below Sowbelly Gulch at Helper, Ut (d)	09313040	23.0	1979-81
Price River near Helper, Ut (d)	09313500	a530	1904-34
Coal Creek near Helper, Ut (d)	09313965	25.3	1978-81
Soldier Creek below Mine near Wellington, Ut (d)	09313975	17.7	1978-84
Dugout Creek near Sunnyside, Ut (d)	09313985	5.8	1980-81
Price River near Wellington, Ut (d)	09314000	853	1950-58
Price River below Miller Creek near Wellington, Ut (d)	09314250	956	1972-86
Desert Seep Wash near Wellington, Ut (d)	09314280	191	1972-86
Grassy Trail Creek at Sunnyside, Ut (d)	09314340	40.1	1978-85
Horse Canyon near Sunnyside, Ut (d)	09314374	12.5	1978-81
Price River at Woodside, Ut (d)	09314500	1540	1909-10 1911 1945-92
TRIBUTARIES BETWEEN PRICE RIVER AND SAN RAFAEL RIVER			
Saleratus Wash at Green River, Ut (d)	09315500	a180	1949-70
Browns Wash near Green River, Ut (d)	09316000	a75	1950-68
Floy Wash near Green Riv, Ut (d)	09316100	56.6	1983-86
Boulger Creek near Fairview, Ut (d)	09317000	a1.9	1938-40 1942-49 1950-58
Candland Ditch near Mt Pleasant, Ut (d)	09317500	---	1950-58
Crandall Canyon at mouth near Huntington, Ut (d)	09317919	5.70	1978-84
Tie Fork Canyon near Huntington, Ut (d)	09317920	11.7	1978-81
Huntington Creek near Huntington, Ut (d)	09318000	187	1909-79
Huntington Creek near Castle Dale, Ut (d)	09318500	325	1911-17 1919-21 1950-58
Horseshoe Tunnel near Ephraim, Ut (d)	09320000	---	1950-58
Larsen Tunnel near Ephraim, Ut (d)	09320500	---	1949-58
Coal Fork Ditch near Mount Pleasant, Ut (d)	09321000	---	1950-58 1976
Twin Creek Tunnel near Mount Pleasant, Ut (d)	09321500	---	1950-58
Black Canyon Ditch near Spring City, Ut (d)	09322000	---	1950-58
Cedar Creek Tunnel near Spring City, Ut (d)	09322500	---	1950-58
Reeder Ditch near Spring City, Ut (d)	09323500	---	1950-58
Seely Creek near Orangeville, Ut (d)	09324000	a150	1954-57
Cottonwood Creek above Straight Canyon near Orangeville, Ut (d)	09324200	21.9	1978-81
Cottonwood Creek near Orangeville, Ut (d)	09324500	208	1910-27 1933-70 1975-85

## DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record
TRIBUTARIES BETWEEN PRICE RIVER AND SAN RAFAEL RIVER--Continued			
Cottonwood Creek near Castle Dale, Ut (d)	09325000	261	1947-58
San Rafael River Above Ferron Creek near Castle Dale, Ut (d)	09325100	a680	1965-70
John August Ditch near Ephraim, Ut (d)	09325500	---	1949-58
Madsen Ditch near Ephraim, Ut (d)	09326000	---	1950-58
Ferron Creek near Ferron, Ut (d)	09327000	159	1909-11
Ferron Creek near Castle Dale, Ut (d)	09327500	a210	1912-14
			1948-58
Ferron Creek below Paradise Ranch near Clawson, Ut (d)	09327550	221	1976-86
San Rafael River near Castle Dale, Ut (d)	09328000	930	1948-64
			1972-86
San Rafael River at San Rafael Bridge Campground, near Castle Dale, Ut (d)	09328100	1,284	1975-86
Crescent Wash Reservoir, Ut (e)	09328870	19.0	1954-57
DIRTY DEVIL RIVER BASIN			
Fremont River Below Fish Lake near Fremont, Ut (d)	09329000	a27	1939-45
Fremont River near Fremont, Ut (d)	09329500	205	1949-58
Pine Creek near Bicknell, Ut (d)	09329900	104	1965-80
Pleasant Creek near Caineville Ut (d)	09330210	115	1969-72
Bull Creek near Hanksville, Ut (d)	09330410	7.53	1983-91
Muddy Creek (Lower Station) near Emery, Ut (d)	09331000	114	1911-14
Ivie Creek above diversions near Emery, Ut (d)	09331500	a50	1951-61
Convulsion Canyon near Emery, Ut (d)	09331850	21.6	1981-84
Quitcupah Creek near Emery, Ut (d)	09331900	104	1978-81
Christiansen Wash near Emery, Ut (d)	09331950	13.6	1978-84
Muddy Creek below I-70 near Emery, Ut (d)	09332100	418	1973-86
Muddy Creek below Ivie Creek near Emery, Ut (d)	09332500	a440	1950-61
Muddy Creek at Delta Mine near Hanksville, Ut (d)	09332700	841	1975-86
Muddy Creek at mouth near Hanksville, Ut (d)	09332800	1,552	1976-80
Dirty Devil River near Hanksville, Ut (d)	09333000	a3,490	1946-48
North Wash near Hanksville, Ut (d)	09334000	136	1951-70
White Canyon near Hanksville (Hite), Ut (d)	09334500	276	1951-70
Colorado River at Hite, Ut (d)	09335000	a76,600	1948-58
ESCALANTE RIVER BASIN			
North Creek near Escalante, Ut (d)	09335500	a90	1950-55
Birch Creek near Escalante, Ut (d)	09336000	a36	1950-51
Birch Creek at mouth near Escalante, Ut (d)	09336500	a100	1952-55
East Fork Boulder Creek near Boulder, Ut (d)	09338000	21.4	1951-55
			1958-72
East Fork Deer Creek near Boulder, Ut (d)	09338500	a1.9	1950-55
Boulder Creek (below Deer Creek) near Boulder, Ut (d)	09339000	a175	1950-55
Escalante River at mouth near Escalante, Ut (d)	09339500	a1,770	1951-55
SAN JUAN RIVER BASIN			
McElmo Creek near Bluff, Ut (d)	09372200		1981-82
Spring Creek above diversions near Monticello, Ut (d)	09376900	4.95	1966-72
Davenport and Campbell Canal near Monticello, Ut (d)	09377500	---	1914-16
Spring (Vaga) Creek near Monticello, Ut (d)	09377000	a8.5	1914-16
Green Canal near Monticello, Ut (d)	09378000	---	1914-16
North Creek above Ranger Station near Monticello, Ut (d)	09378100	8.68	1980-85
Montezuma Creek at Golf Course, at Monticello, Ut (d)	09378200	17.6	1979-92
Cottonwood Wash near Blanding, Ut (d)	09378700	205	1965-87
Comb Wash near Bluff, Ut (d)	09379000	278	1959-68
Colorado plus Green plus San Juan (temp) (d)	09379505		1928-84
COLORADO RIVER TRIBUTARIES BELOW GLEN CANYON DAM			
Henrieville Creek near Henrieville, Ut (d)	09381000	a29	1950-55
Paria River near Cannonville, Ut (d)	09381500	a220	1951-55
Mill Creek above study area near Glendale, Ut (d)	09403620	4.81	1976-77
Skutumpah Creek below study area near Glendale, Ut (d)	09403630	16.0	1976-77
Intermediate Drainage near Glendale, Ut (d)	09403640	2.49	1976-77
Thompson Creek above study area near Glendale, Ut (d)	09403650	9.80	1976-77
Thompson Creek below study area near Glendale, Ut (d)	09403660	16.6	1976-77
VIRGIN RIVER BASIN			
Crystal Creek near Cedar City, Ut (d)	09405300	10.2	1957-61
North Fork Virgin River near Glendale, Ut (d)	09405400	5.65	1973-78
North Fork Virgin River below Bulloch Canyon near Glendale, Ut (d)	09405420	29.6	1975-84
North Fork Virgin River above Zion Narrows near Glendale, Ut (d)	09405450	45.5	1979-84
Springdale Canal near Springdale, Ut (d)	09405499	---	1969-89
LaVerkin Creek near LaVerkin, Ut (d)	09406150	91.3	1984-91
Kanarra Creek at Kanarrville, Ut (d)	09406300	9.85	1960-82
Ash Creek near New Harmony, Ut (d)	09406500	a135	1939-48
Ash Creek Reservoir near New Harmony, Ut (e)	09406600	---	1973-82
South Ash Creek below Mill Creek near Pintura, Ut (d)	09406700	11.0	1966-82
Ash Creek above Toquerville, Ut (d)	09407000	201	1941-42
			1984-91
West Field Ditch at Toquerville, Ut (d)	09407150		1973-82
Ash Creek below West Field Ditch at Toquerville, Ut (d)	09407200	201	1973-82
Ash Creek below diversion dam at Toquerville, Ut (d)	09407201		1973-82
Ash Creek near Toquerville, Ut (d)	09407600	213	1956-58
Ash Creek near LaVerkin, Ut (d)	09407800	215	1957-58
Virgin River near Hurricane, Ut (d)	09408150	1,499	1967-89
Fort Pierce Wash near St. George, Ut (d)	09408195	1,349	1985-89
Santa Clara River near Central, Ut (d)	09409000	a97	1909-30
			1939-61
Moody Wash near Veyo, Ut (d)	09409500	a33	1939-42
			1955-69
Santa Clara River above Winsor Dam near Santa Clara, Ut (d)	09410000	338	1942-71
Santa Clara River near Santa Clara, Ut (d)	09410400	410	1965-74
Santa Clara River (Creek) near St. George, Ut (d)	09412500	502	1909-13
Virgin River near St. George, Ut (d)	09413500	3,961	1951-57

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record
THE GREAT BASIN			
Great Salt Lake at Promontory Point, Ut (e)	10010050	---	1975-82
Great Salt Lake at AIC near Syracuse, Ut (e)	10010300	---	1975-82
BEAR RIVER BASIN			
East Fork Bear River near Evanston, Wy (d)	10010400	34.6	1974-86
Hilliard East Fork Canal near State Line near Evanston, Wy (d)	10010500	---	1944-47 1953-56
West Fork Bear River at Whitney Dam, near Oakley, Ut (d)	10011200	a7.5	1964-86
West Fork Bear River below Deer Creek near Evanston, Wy (d)	10011400	52.2	1974-86
Mill Creek at Utah-Wyoming State Line (d)	10012000	a59	1950-62
Mill Creek near Evanston, Wy (d)	10012500	60.6	1942-48
Bear River above Sulphur Creek near Evanston, Wy (d)	10014000	282	1946-56
Sulphur Creek below reservoir, near Evanston, Wy (d)	10015900	69.2	1958-92
Sulphur Creek near Evanston, Wy (d)	10016000	80.5	1942-59
Bear River at Millis, near Evanston, Wy (d)	10016500	a420	1942-46
Yellow Creek near Evanston Wy (d)	10017000	a80	1943-45 1950-78
Coyote Creek near Evanston, Wy (d)	10017500	a28	1942-45
Bear River near Evanston, Wy (d)	10019000	715	1913-56
Chapman Canal at State Line near Evanston, Wy (d)	10019500	---	1942-86
Bear River near Woodruff, Ut (d)	10020500	a870	1943-61
Woodruff Creek below reservoir near Woodruff, Ut (d)	10020900	50.0	1971-86
Woodruff Creek near Woodruff, Ut (d)	10021000	a65	1938-43 1950-75
Birch Creek near Woodruff, Ut (d)	10021500	a17	1949-56
Randolph Creek near Randolph, Ut (d)	10024000	30.3	---
Otter Creek near Randolph, Ut (d)	10025000	36.2	1939-44
Bear River near Randolph, Ut (d)	10026500	1,616	1943-92
Rock Creek near Fossil, Wy (d)	10026800	49.0	1961-66
Twin Creek at Sage, Wy (d)	10027000	246	1946-62
Bear River below Pixley Dam near Cokeville, Wy (d)	10028500	2,032	1941-43 1952-56 1958
Bear River above Sublette Creek near Cokeville, Wy (d)	10029500	a2,110	1948-55
Smiths Fork above Hobbie Creek near Geneva, Id (d)	10031000	---	1944-46
Hobbie Creek near Geneva, Id (d)	10031500	86.1	1943-46
Coal (Howland) Creek near Cokeville, Wy (d)	10032500	---	1944-48 1953-56
Muddy Creek above Mill Creek near Cokeville, Wy (d)	10032700	20.7	1964-69
Mill Creek near Cokeville, Wy (d)	10032800	8.07	1965-69
Grade Creek near Cokeville, Wy (d)	10033000	---	1944-48
Pine Creek above Diversions near Cokeville, Wy (d)	10033500	---	1944-48 1953-56
Pine Creek above Covey Canal near Cokeville, Wy (d)	10034500	---	1944-48 1953-56
Smiths Fork at Cokeville, Wy (d)	10035000	275	1942-52
Spring Creek to Collette Creek near Cokeville, Wy (d)	10036000	---	1944-45 1953-56
Birch Creek near Cokeville, Wy (d)	10036500	---	1944-45
Hickman Canal near Cokeville, Wy (d)	10037000	---	1944-48
George Bourne Canal near Cokeville, Wy (d)	10037500	---	1944-48
Thomas Fork near Geneva, Id (d)	10040000	45.3	1939-51
Salt Creek near Geneva, Id (d)	10040500	37.6	1939-51
Thomas Fork near Wyoming-Idaho state line (d)	10041000	113	1949-92
Thomas Fork above Diversions near Geneva, Id (d)	10041500	---	1944-46
Thomas Fork near Raymond, Id (d)	10042500	202	1942-52
Bear River at Harer, Id (d)	10044000	2,839	1913-86
Dingle Inlet Canal near Dingle, Id (d)	10044300	---	1911-92
Bear River at Dingle, Id (d)	10044500	a2,810	1903-14
Bear River below Stewart Dam near Montpelier, Id (d)	10046500	2,853	1922-92
Montpelier Creek near Montpelier, Id (d)	10047000	28.2	1939-44
Montpelier Creek below Dvrsns at Montpelier, Id (d)	10048500	---	1944-47
St. Charles Creek above Diversions near St. Charles, Id (d)	10054600	17.4	1944-45 1961-66
Bloomington Creek near Bloomington, Id (d)	10058500	22.1	1942-47
Bloomington Creek at Bloomington, Id (d)	10058600	24.0	1960-86
Paris Power Canal near Paris, Id (d)	10060000	---	1943-47
Paris Creek near Paris, Id (d)	10060500	18.6	1943-47
Slight Canyon Creek near Paris, Id (d)	10062000	6.81	1943-45
Mill Creek above West Fork near Liberty, Id (d)	10062500	18.4	1944-47
Mill Creek near Liberty, Id (d)	10063000	27.2	1943-47
Bear River at Pescadero, Id (d)	10068500	3,705	1921-54
Georgetown Creek near Georgetown, Id (d)	10069000	22.2	1911-14 1939-56
Georgetown Creek below diversions at Georgetown, Id (d)	10070500	---	1944-47
Skinner Creek at Nounan, Id (d)	10071500	5.41	1939-45
Stauffer Creek near Nounan, Id (d)	10072000	---	1939-44
Eightmile Creek near Soda Springs, Id (d)	10072800	22.6	1960-86
Eightmile Creek below Diversions near Soda Springs, Id (d)	10073500	31.0	1944-47
Bear River at Soda Springs, Id (d)	10075000	3,972	1896-98 1925-44 1944-49 1953
Soda Creek at Fivemile Meadow near Soda Springs, Id (d)	10076400	a49	1964-86
Soda Creek at Lau Ranch near Soda Springs, Id (d)	10076500	a49	1923-26
Soda Creek near Soda Springs, Id (d)	10077000	54.6	1913-26 1928-29
Soda Creek below Diversions at Soda Springs, Id (d)	10078000	---	1945-47
Treasureton Canal near Swan Lake, Id (d)	10083500	---	1939-46
Cottonwood Creek near Swan Lake, Id (d)	10084000	42.6	1939-46
Cottonwood Creek near Cleveland, Id (d)	10084500	61.7	1938-86
Mink Creek Canal near Mink Creek, Id (d)	10087000	---	1949-52
Mink Creek below Dry Fork near Mink Creek, Id (d)	10087500	19.3	1947-52 1955-62
Twin Lakes Canal near Mink Creek, Id (d)	10088000	---	1943-52
Preston Riverdale and Mink Creek Canal near Mink Creek, Id (d)	10088500	---	1943-52
Mink Creek near Mink Creek, Id (d)	10089500	58.7	1943-52



WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

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Station name	Station number	Drainage area (sq mi)	Period of record
BEAR RIVER BASIN--Continued			
Bear River near Preston (at Battlecreek), Id (d)	10090500	4,545	1889-19 1944-45 1981-86
Deep Creek near Clifton, Id (d)	10091200	107	1966-78
Bear River near Weston, Id (d)	10091500	4,880	1919-44
Weston Creek at Weston, Id (d)	10092000	a63	1942-44
Cub River Irrigation Company Pump Canal near Weston, Id (d)	10092500	---	1934-44
Cub River near Preston, Id (d)	10093000	19.4	1940-52 1955-86
Cub River-Worm Creek Canal near Preston, Id (d)	10094000	---	1943-52
Preston-Whitney Canal near Preston, Id (d)	10095000	---	1944-45 1946-52
Cub River Canal near Preston, Id (d)	10095500	---	1944-52
East Branch Cub River Canal near Lewiston, Ut (d)	10095900	---	1962-63
Cub River above Maple Creek near Franklin, Id (d)	10096000	53.7	1940-52
Maple Creek near Franklin, Id (d)	10096500	21.2	1946-52
Worm Creek near Preston, Id (d)	10098500	11.0	1943-46
High Creek near Richmond, Ut (d)	10099000	16.2	1944-52 1971-72
Cub River near Richmond, Ut (d)	10102200	a200	1978-89
Summit Creek above diversions near Smithfield, Ut (d)	10102300	11.6	1962-63 1944-45 1961-79
Birch Creek at mouth near Smithfield, Ut (d)	10103000	---	1944-45
South Fork Little Bear River near Avon, Ut (d)	10104600	26.0	1966-74
Little Bear River below Davenport Creek near Avon, Ut (d)	10104700	61.6	1960-92
East Fork Little Bear River above Reservoir near Avon, Ut (d)	10104900	56.7	1964-86
East Fork Little Bear River (below Pole Creek) near Avon, Ut (d)	10105000	49.7	1938-50
East Fork Little Bear Riv below Pole Creek near Avon, Ut (d)	10105500	a67	1927-30
Little Bear River near Paradise, Ut (d)	10106000	203	1937-86
Hyrum Reservoir near Hyrum, Ut (e)	10107000	220	1938-80
Little Bear River near Hyrum, Ut (d)	10107500	222	1938-74
Little Bear River at Wellsville, Ut (d)	10107600	245	1966-68
Utah Power and Light Tailrace near Logan, Ut (d)	10108000	---	1913-70
Logan, Hyde Park and Smithfield Canal near Logan, Ut (d)	10108500	---	1904-07 1909-10 1912-64
Logan River near Logan, Ut (d)	10109500	---	1896-1912
Logan Northern Canal near Logan, Ut (d)	10110500	---	1913-16 1944-45
Logan River below Logan Northern Canal near Logan, Ut (d)	10111000	---	1915-17
Blacksmith Fork below Mill Creek near Hyrum, Ut (d)	10111700	78.0	1965-69 1985-92
Blacksmith Fork at Hardware Ranch near Hyrum, Ut (d)	10112000	a130	1944-50
Blacksmith Fork at Municipal Powerplant near Hyrum, Ut (d)	10112500	153	1929-35
Hyrum City Power Canal near Hyrum, Ut (d)	10113000	---	1904-10
(Blacksmith Fork Municipal Powerplant Race)			1914-17
Blacksmith Fork at U P & L Plant near Hyrum, Ut (d)	10114000	---	1914-16
Blacksmith Fork below U P & L Plant near Hyrum, Ut (d)	10114500	286	1900-02 1904-10
(Blacksmith Fork at Hyrum)			1914-16
Logan River below Blacksmith Fork near Logan, Ut (d)	10115200	524	1964-80
Clarkston Creek near Newton, Ut (d)	10115500	a43	1939-47
Cutler Reservoir at Cache Junction, Ut (e)	10116000	---	1944-50
West Canal above Salt Creek diversion near Tremonton, Ut (d)	10117510	---	1980-84 1986
West Canal below Salt Creek diversion near Tremonton, Ut (d)	10117530	---	1980-84 1986
Malad River below Springs near Malad City, Id (d)	10118200	a3.3	1931-32 1940-47
Warm Springs Canal near Samaria, Id (d)	10118300	---	1940-45
Malad River near Samaria, Id (d)	10118400	a31	1941-45
Little Malad River above Elkhorn Reservoir near Malad, Id (d)	10119000	a120	1911-13
Elkhorn Reservoir near Malad City (near Malad), Id (e)	10119500	153	1940-53
Little Malad River below Elkhorn Reservoir near Malad, Id (d)	10120000	153	1940-53
Little Malad River below Sand Ridge Dam near Malad, Id (d)	10120500	223	1945-51
Devil Creek above Campbell Creek near Malad City, Id (d)	10122500	a13	1938-61
Devil Creek above Evans Dividers near Malad City, Id (d)	10123000	a36	1940-43 1946-53
Devil Creek near Malad City (near Malad), Idaho (d)	10123500	a39	1931-40
Deep Creek below First Creek near Malad City, Id (d)	10125000	a32	1931-48
Malad River at Woodruff, Id (d)	10125500	a485	1938-82
Malad River near Plymouth, Ut (d)	10125600	a632	1964-80
Bear River Duck Club near Bear River City, Ut (d)	10125700	---	1964-73
Malad River below Bear River Duck Club Canal near Bear River City, Ut (d)	10125800	a698	1964-74
TRIBUTARIES TO GREAT SALT LAKE BETWEEN BEAR RIVER AND WEBER RIVER			
Sulphur Creek near Corrinne, Ut (d)	10126180	15.4	1972-86
Box Elder Creek at Mantua, Ut (d)	10126400	14.0	1960-63
Box Elder Creek near Brigham City, Ut (d)	10126500	33.4	1918-21
Box Elder Creek at Brigham City, Ut (d)	10127000	34.2	1909-12
Salt Spring near Tremonton, Ut (d)	10127040	---	1979-86
Salt Creek below Salt Spring near Tremonton, Ut (d)	10127050	---	1979-86
Black Slough near Brigham City, Ut (d)	10127100	31.1	1972-86
Highway 83 Culverts (d)	10127107	---	1980-86
Sulphur Creek & Black Slough (d)	10127108	---	1980-86
Culverts & Sulphur Creek & Black Slough (d)	10127109	---	1980-86
Bear River Basin outflow across State Hwy 83 near Corinne, Ut (d)	10127110	---	1972-86
WEBER RIVER BASIN			
Smith and Morehouse Creek near Oakley, Ut (d)	10128000	33.8	1947 1976-86
South Fork Weber River near Oakley, Ut (d)	10128200	a16	1965-74
Weber Provo Diversion Canal at Oakley, Ut (d)	10129000	---	1931-69
Weber River near Peoa, Ut (d)	10129300	296	1957-77
Crandall Creek near Peoa, Ut (d)	10129350	11.8	1963-73
East Fork Chalk Creek near Coalville, Ut (d)	10130700	a35	1965-74

## DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record
WEBER RIVER BASIN--CONTINUED			
Lost Creek at Croydon, Ut (d)	10132900	a220	1966-67
Lost Creek at Devils Slide (near Croydon), Ut (d)	10133000	223	1905-1921-33
Weber River at Devils Slide, Ut (d)	10133500	1,192	1905-55
Threemile Creek near Park City, Ut (d)	10133700	2.68	1964-74
East Canyon Creek near Park City, Ut (d)	10133900	68.9	1982-84
Hardscrabble Creek near Porterville, Ut (d)	10135000	28.0	1937-40
East Canyon Creek below diversions near Morgan, Ut (d)	10135500	---	1941-70
Weber River near Morgan, Ut (d)	10136000	a1,500	1951-55
Weber River at Ogden, Ut (d)	10137000	a1,670	1951-58
Causey Reservoir near Huntsville, Ut (e)	10137290	92.2	1966-68
South Fork Ogden River below Causey Dam near Huntsville, Ut (d)	10137300	92.3	1966-67
South Fork Ogden River at Huntsville, Ut (d)	10137600	a170	1937-57
North Fork Ogden River near Eden, Ut (d)	10137680	6.03	1959-65
North Fork River near Huntsville, Ut (d)	10137700	61.4	1964-74
Middle Fork Ogden River above diversion near Huntsville, Ut (d)	10137780	31.3	1960-65
Middle Fork Ogden River at Huntsville, Ut (d)	10137800	32.9	1964-74
Spring Creek at Huntsville, Ut (d)	10137900	a7.2	1958-65
Ogden River near Ogden, Ut (d)	10139500	321	1904-12
Ogden River below Pineview Dam near Ogden, Ut (d)	10140000	321	1931-59
Ogden River at Powder Mill near Ogden, Ut (d)	10140500	a360	1937-59
Willard Bay Reservoir near Plain City, Ut (e)	10140800	---	1889-90
Hooper Slough near Hooper, Ut (d)	10141040	13.0	1897-98
South Fork Weber Canal near Hooper, Ut (d)	10141050	---	1965-81
South Fork Weber River near Hooper, Ut (d)	10141100	---	1975-83
Middle Fork Weber River near Hooper, Ut (d)	10141150	---	1972-76
North Fork Weber River near Hooper, Ut (d)	10141200	---	1972-75
TRIBUTARIES TO GREAT SALT LAKE BETWEEN WEBER RIVER AND JORDAN RIVER			
Storm Drain at 1700 N. 475 W., Sunset, Ut (d)	10141395	0.28	1971-75
Howard Slough at Hooper, Ut (d)	10141400	---	1948-83
Holmes Creek near Kayville, Ut (d)	10141500	2.49	1952-55
Farmington Creek above div near Farmington, Ut (d)	10142000	10.0	1972-84
Ricks Creeks above diversions, near Centerville, Ut (d)	10142500	2.35	1951-66
Parrish Creek above diversions near Centerville, Ut (d)	10143000	2.08	1950-71
Centerville Creek above diversions near Centerville, Ut (d)	10143500	3.15	1951-66
Stone Creek above diversions near Bountiful, Ut (d)	10144000	4.48	1950-80
Mill Creek at Mueller Park near Bountiful, Ut (d)	10145000	8.88	1951-66
Storm Drain east of Orchard Drive at Bountiful, Ut (d)	10145125	0.80	1949-83
Storm Drain to Mill Creek, 620 S. 200 W., Bountiful, Ut (d)	10145126	0.28	1949-83
JORDAN RIVER BASIN			
Salt Creek near Nephi, Ut (d)	10145500	a95	1925-38
Salt Creek at Nephi, Ut (d)	10146000	95.6	1951-80
Current Creek near Goshen, Ut (d)	10146500	303	1954-60
Summit Creek near Santaquin, Ut (d)	10147000	19.2	1911-16
Payson Creek above diversions, near Payson, Ut (d)	10147500	14.6	1955-66
Payson Creek (Peteetneet) Creek near Payson, Ut (d)	10148000	18.8	1948-62
Nebo Creek near Thistle, Ut (d)	10148400	25.6	1910-16
Spanish Fork at Thistle, Ut (d)	10148500	36.7	1964-73
Diamond Fork near Thistle, Ut (d)	10150000	141	1908-25
U.S. Bureau of Reclamation Power Canal near Spanish Fk, Ut (d)	10151000	---	1932-74
Spanish Fork near Spanish Fork, Ut (d)	10151500	a670	1908-17
Spanish Fork near Lakeshore, Ut (d)	10152000	675	1909-17
Spanish Fork at mouth near Lake Shore, Ut (d)	10152001	---	1904-07
Hobble Creek near Springville, Ut (d)	10152500	105	1909-25
Maple Creek near Mapleton, Ut (d)	10152700	3.13	1938-88
Maple Creek near Springville, Ut (d)	10153000	10.8	1978-82
Provo River near Kamas, Ut (d)	10153500	29.6	1904-16
Shingle Creek near Kamas, Ut (d)	10154000	a8.4	1945-74
Snake Creek near Charleston, Ut (d)	10156000	38.6	1965-72
Round Valley Creek near Wallburg, Ut (d)	10158500	71.9	1912-13
Deer Creek near Wildwood, Ut (d)	10160000	a26	1950-69
Provo River near Wildwood, Ut (d)	10160500	574	1939-50
North Fork Provo River at Wildwood, Ut (d)	10160800	12.3	1939-49
Provo River at Vivian Park, Ut (d)	10161000	598	1965-74
South Fork Provo River at Vivian Park, Ut (d)	10161500	33.4	1912-63
Provo River above Telluride Power Co Dam near Provo, Ut (d)	10162000	a640	1912-62
Provo River at mouth of canyon near Provo, Ut (d)	10162500	a640	1905-11
Rock Creek Overflow east of Hwy 189 near Provo, Ut (d)	10162850	0.66	1889-1906
South Fork of American Fork near American Fk, Ut (d)	10164000	8.87	1948-83
American Fork (River) near American Fork, Ut (d)	10165000	a66	1912-14
Dry Creek near Alpine, Ut (d)	10165500	9.82	1889-90
Fort Creek at Alpine, Ut (d)	10166000	6.55	1897
Utah Lake near Lehi (at Geneva) (near Span Fk), Ut (e)	10166500	2,965	1900-01
Jordan River Station No. 1 at Narrows, Ut (d)	10167001	---	1903-05
East Jordan Canal at Jordan Narrows near Bluffdale, Ut (d)	10167100	---	1948-55
East Jordan Canal at Little Cottonwood Creek near Sandy, Ut (US) (d)	10167105	---	1947-55
East Jordan Canal at Little Cottonwood Creek near Sandy, Ut (DS) (d)	10167106	---	1883-1960
East Jordan Canal at pumphouse at 6200 So near Murray, Ut (d)	10167115	---	1980-83
Upper Canal at 5800 South (Tolcate Ln) near Murray, Ut (d)	10167122	---	1980-83
Upper Canal at Wild Rose Ln near Salt Lake City, Ut (d)	10167125	---	1980-82
Upper Canal at Mill Creek (2000 East) near Salt Lake City, Ut (d)	10167127	---	1980-82
Jordan & Salt Lake Canal at Little Cottonwood Creek near SLC, Ut (US) (d)	10167141	---	1980-81
Jordan & Salt Lake Canal at Little Cottonwood Creek near SLC, Ut (DS) (d)	10167142	---	1980-82
Jordan & Salt Lake Canal at Big Cottonwood Creek near Murray, Ut (US) (d)	10167145	---	1980-81
Jordan & Salt Lake Canal at Big Cottonwood Creek near Murray, Ut (DS) (d)	10167146	---	1980-81
Jordan & Salt Lake Canal at Mill Creek near Salt Lake City, Ut (US) (d)	10167147	---	1980-82
Jordan & Salt Lake Canal at Mill Creek near Salt Lake City, Ut (DS) (d)	10167148	---	1980-82
Jordan & Salt Lake Canal at Zenith Ave near Salt Lake City, Ut (d)	10167149	---	1980-81
Utah & Salt Lake Canal at Jordan Narrows near Bluffdale, Ut (d)	10167160	---	1980-83

## DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record
JORDAN RIVER BASIN--Continued			
Jordan River at 9400 South near South Jordan, Ut (d)	10167200	q3,130	1965-67
Bells Canyon Conduit 1000 East 110000 South (d)	10167220	---	1948-81 1982-86 1980-84 1986-89
Jordan River at 90th South near Midvale, Ut (d)	10167230	q3,130	1980-84 1986-89
90th South Conduit at Jordan River near Midvale, Ut (d)	10167240		1980-84
I-215 Median Drain at Jordan River near Murray, Ut (d)	10167242	0.20	1948-83 1984-86
Jordan River at 5800 South near SLC, Ut (d)	10167300	q3,254	1965-68 1980-85
Little Cottonwood Creek (channel) near SLC, Ut (d)	10167499		1980-88
Little Cottonwood Creek near Salt Lake City, Ut (d)	10167500	27.4	1898-99 1904-68 1980
Little Cottonwood Creek at 2050 East near SLC, Ut (d)	10167700	35.2	1963-67 1979-81 1983-87
Little Cottonwood Creek at Crestwood Park at SLC, Ut (d)	10167800	---	1987-89
Little Cottonwood Creek at Jordan River near SLC, Ut (d)	10168000		1980-84 1987-88
Big Cottonwood Creek (Cottonwood Creek) near SLC, Ut (d)	10168500	50.0	1898-1967
Big Cottonwood Creek at 5550 South near SLC, Ut (d)	10168800	57.3	1964-68 1980-89
Neffs Creek above Wasatch Boulevard near SLC, Ut (d)	10168832	---	1984-86
Spring Run at 9th East & 48th So near Murray, Ut (d)	10169000	---	1933-35
Big Cottonwood Creek at Jordan River near SLC, Ut (d) (at 2nd West near Murray, Ut)	10169500	a78	1933-35 1980-82 1987-88
Mill Creek above Elbow Fork near Salt Lake City, Ut (d)	10169800	7.7	1964-68
Mill Creek near Salt Lake City, Ut (d)	10170000	21.7	1964-68 1980
Boundry Springs near Salt Lake City, Ut (d)	10170001	---	1963-67
Mill Creek at 2200 East near SLC, Ut (d)	10170200	22.6	1963-67
Mill Creek at Jordan River near SLC, Ut (d)	10170250	a32	1984 1986-88
Combined flow Jordan River and Surplus Canal at SLC, Ut (d)	10170490		1943-89
North Point Canal below Goss Flume at SLC, Ut (d)	10170700	---	1963-67 1979-83
Surplus Canal at North Temple at SLC, Ut (d)	10170750	---	1976-82
Surplus Canal at Cohen Flume near SLC, Ut (d)	10170800	---	1963-67
Parleys Creek near Salt Lake City, Ut (d)	10171500	50.1	1898-1963
Parleys Creek at Suicide Rock near SLC, Ut (d)	10171600	50.7	1964-68 1980-88
Emigration Creek below Burr Fork near SLC, Ut (d)	10171900	5.9	1964-68
Emigration Creek near Salt Lake City, Ut (d)	10172000	18.4	1898-1960 1960-68 1980-86
Emigration Creek below 1300 East at SLC, Ut (d)	10172100	a9	1963-67
Red Butte Creek below reservoir near SLC, Ut (d)	10172220	7.95	1942-67 1980-88
1300 South Conduits at Jordan River, combined flows (d)	10172350		1981 1987-88
South Conduit of 1300 South Conduit at Jordan River, SLC, Ut (d)	10172351		1986-89
North Conduit of 1300 South Conduit at Jordan River, SLC, Ut (d)	10172352		1980-81 1985-89
City Creek above Wasatch Drive, near SLC, Ut (d)	10172400	17.0	1964-68
City Creek near Salt Lake City, Ut (d)	10172500	19.2	1898-1960 1960-69 1980
Jordan River at 5th North at SLC, Ut (d)	10172550		1975-86
Jordan River at Cudahay Lane near SLC, Ut (d)	10172600	q3,590	1963-68 1974-76
Sewage Canal at Cudahay Lane near SLC, Ut (d)	10172620	---	1963-67
Storm Drain at International Center near SLC, Ut (d)	10172624	0.08	1948-83
Goggin Drain near Magna, Ut (d)	10172630	---	1964-67 1972-84
Lee Creek near Magna, Ut (d)	10172640		1972-82
Kennecott Drain near Magna, Ut (d)	10172650	---	1964-67 1972-84
RUSH VALLEY			
East Government Creek Tributary near Vernon, Ut (d)	10172720	a0.98	1961-74
TOOELE VALLEY			
Middle Canyon Creek near Tooele, Ut (d)	10172794	12.1	1984-86
North Willow Creek near Grantsville, Ut (d)	10172805	5.38	1979-92
GREAT SALT LAKE DESERT			
Deep Creep near Goshute, Ut (d)	10172893	a43	1964-68
Great Salt Lake West Pond near Wendover, Ut (e)	10172903	---	1987-89
Pine Creek near Grouse Creek, Ut (d)	10172921	---	1972-73
Dove Creek near Park Valley, Ut (d)	10172940	33.2	1959-68 1971-73
Fisher Creek near Park Valley, Ut (d)	10172950	---	1972-73
Indian Creek near Park Valley, Ut (d)	10172955	---	1971-73
West Locomotive Spring at Locomotive Spring near Snowville, Ut (d)	10172963	---	1969-73
Baker Spring at Locomotive Spring near Snowville, Ut (d)	10172964	---	1969-73
Bar M Spring at Locomotive Spring near Snowville, Ut (d)	10172965	---	1969-80
Off Spring at Locomotive Spring near Snowville, Ut (d)	10172967	---	1969-80
Sparks Spring at Locomotive Spring near Snowville, Ut (d)	10172968	---	1969-80



## DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Period of record
SEVIER LAKE BASIN			
Hatch Bence Canal near Hatch, Ut (d)	10173000	---	1914
Mammoth Creek near Hatch, Ut (d)	10173500	151	1916-19 1912-14 1915-19
Midway Creek near Hatch, Ut (d)	10173600	25.7	1958-62
Navajo Lake west of Dyke near Hatch, Ut (e)	10173700	---	1954-59
Duck Creek near Hatch, Ut (d)	10173900	---	1954-59
Asay Creek above West Fork near Hatch, Ut (d)	10174000	105	1954-59
Asay Creek near Hatch, Ut (d)	10174200	a96	1912-14 1939-41
Red Canyon Tributary near Bryce Canyon, Ut (d)	10174800	a2.2	1959-74
State Canal near Panguitch, Ut (d)	10175500	---	1913-19
Long Canal near Panguitch, Ut (d)	10176000	---	1914-19
Panguitch Creek near Panguitch, Ut (d)	10176300	97.0	1961-80
East Panguitch Canal near Panguitch, Ut (d)	10176500	---	1914-19
Panguitch Creek above Canals near Panguitch, Ut (d)	10177000	a110	1915-20
Panguitch Creek below Canals at Panguitch, Ut (d)	10177500	---	1915
Barton and LeFevere Canal near Panguitch, Ut (d)	10178000	---	1917-18
McEwen Canal near Panguitch, Ut (d)	10178500	---	1915-19
Old Houston Canal near Panguitch, Ut (d)	10179000	---	1914-19
Fox Canal near Circleville, Ut (d)	10180500	---	1915-19
Circleville Canal near Circleville, Ut (d)	10181000	---	1914-19
Old Kingston Canal near Circleville, Ut (d)	10181500	---	1914-19
Dalton Canal at Circleville, Ut (d)	10182000	---	1914-19
Mitchell Slough Canal near Junction, Ut (d)	10182500	---	1914-19
Junction Middle Canal near Junction, Ut (d)	10183000	---	1915-19
Tropic and East Fork Canal near Tropic, Ut (d)	10184000	---	1950-61
East Fork Seiver River near Antimony, Ut (d)	10184450	a570	1961-66
Coyoto Canal near Coyoto, Ut (d)	10184500	---	1916-19
Antimony Creek near Antimony, Ut (d)	10185000	50.3	1946-48 1957-76
East Fork Sevier River at Antimony (Coyoto), Ut (d)	10185500	---	1915-19
Otter Creek Reservoir Feeder Canal at mouth near Coyota, Ut (d)	10186500	---	1915-20
Otter Creek near Koosharem, Ut (d)	10187300	23.5	1964-82
Otter Creek above Reservoir near Antimony, Ut (d)	10187500	322	1915-20 1961-64 1971-80
Otter Creek near Antimony (Coyoto), Ut (d)	10188500	---	1913-19
Combined Flow Sevier River and East Fork Sevier River (d)	10189001	---	1915-77
Kingston Canal at Kingston, Ut (d)	10189500	---	1914-19
Sevier River near Junction, Ut (d)	10190500	a2,390	1911-16
Sevier River near Marysville, Ut (d)	10192000	a2,560	1906-11
Sevier River at Marysville, Ut (d)	10192500	a2,580	1912-14
Pine (Bullion) Creek at Marysville, Ut (d)	10193500	a29	1914
Cove Canal at Sevier, Ut (d)	10194500	---	1918-19
Clear Creek at Sevier, Ut (d)	10195000	169	1914-19 1912-19 1934-58
Sevier River at Sevier, Ut (d)	10195500	a2,850	1917-29
Monearoe South Bend Canal near Joseph, Ut (d)	10196000	---	1914-19
Sevier Valley Canal near Joseph, Ut (d)	10196500	---	1912-19
Joseph Canal near Joseph, Ut (d)	10197000	---	1914-19
Sevier Valley Canal near Richfield, Ut (d)	10198000	---	1912-19
State Canal near Redmond, Ut (d)	10200000	---	1913-19
Wells Canal near Joseph, Ut (d)	10200500	---	1914-19
Monroe Canal near Elsinore, Ut (d)	10201000	---	1914-19
Elsinore Canal near Elsinore, Ut (d)	10201500	---	1914-19
Brooklyn Canal near Elsinore, Ut (d)	10202000	---	1914-19
Richfield Canal near Fillmore, Ut (d)	10202500	---	1914-19
Annabella Canal at Elsinore, Ut (d)	10203000	---	1914-19
Vermilion Canal near Richfield, Ut (d)	10203500	---	1914-19
Sevier River near Richfield, Ut (d)	10204000	---	1916-18
Mill Creek near Glenwood, Ut (d)	10204200	18.9	1963-74
Rockyford Canal near Vermilion, Ut (d)	10204500	---	1914-35
Sheep Creek near Salina, Ut (d)	10205100	0.30	1958-69
West Fork Sheep Creek near Salina, Ut (d)	10205200	0.43	1958-69
Sheep Creek at mouth near Salina, Ut (d)	10205300	1.47	1958-69
Sevier River below Salina Creek near Salina, Ut (d)	10206001	---	1985-86
West View Canal at Redmond, Ut (d)	10206500	---	1914-19
Fayette Canal near Centerfield, Ut (d)	10207000	---	1914-19
Dover Canal near Gunnison, Ut (d)	10207500	---	1914-19
Sevier River near Gunnison, Ut (d)	10208000	a3,990	1901-17
Oak Creek near Fairview, Ut (d)	10208500	11.8	1965-89
Pleasant Creek near Mount Pleasant, Ut (d)	10210000	---	1955-75
Twin Creek near Mount Pleasant, Ut (d)	10211000	a5.9	1955-66
Big Hollow at Fountain Green, Ut (d)	10211500	---	1965-68
Gunnison Reservoir near Sterling, Ut (e)	10216200	a670	1966-83
San Pitch River near Sterling, Ut (d)	10216210	672	1965-80
Twelvemile Creek near Mayfield, Ut (d)	10216400	59.4	1960-80
San Pitch River near Gunnison, Ut (d)	10216500	886	1900-05 1912-18 1952
Sevier River at Clark's Bridge near Fayette, Ut (d)	10217500	a4,960	1914-16
Wellington Canal near Mills, Ut (d)	10219100	---	1914-18
Sevier River near Mills, Ut (d)	10220000	a5,800	1914-17
Sevier River Land and Water Co. Canal near Leamington, Ut (d)	10220500	---	1914-19
McIntyre Canal near Leamington, Ut (d)	10222500	---	1914-18
Leamington Canal near Leamington, Ut (d)	10223000	---	1914-19
Sevier River at Leamington, Ut (d)	10223500	a5,860	1889-93 1912-14
Oak Creek below big Spring near Oak City, Ut (d)	10224300	17.8	1979-86
Delta and Melville Reservoir near Delta, Ut (e)	10224500	---	1914-17
Canal A (Delta and Melville Canal) near Delta, Ut (d)	10225000	---	1912-19
Sevier River near Delta, Ut (d)	10228000	a7,380	1912-19
Gunnison Bend Reservoir near Delta, Ut (e)	10228500	---	1914-19
Sevier River at Oasis, Ut (d)	10231500	a8,080	1912-27
Chalk Creek near Fillmore, Ut (d)	10232500	58.7	1914 1945-71

WATER RESOURCES DATA FOR UTAH, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

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Station name	Station number	Drainage area (sq mi)	Period of record
SEVIER LAKE BASIN--Continued			
Meadow Creek near Meadow, Ut (d)	10233000	11.6	1914 1965-75
Corn Creek near Kanosh, Ut (d)	10233500		1914 1965-75
Three Creeks near Beaver, Ut (d)	10234000	19.5	1947-61
South Creek near Beaver, Ut (d)	10235000	14.7	1906 1965-76
North Fork North Creek above Pole Creek near Beaver, Ut (d)	10235500	a6.9	1947-49
North Fork North Creek near Beaver, Ut (d)	10236000	14.1	1906 1966-76
South Fork North Creek near Beaver, Ut (d)	10236500	23.0	1906 1966-76
Indian Creek near Beaver, Ut (d)	10237500	18.5	1906 1947-49 1965-76
Indian Creek at Adamsville, Ut (d)	10238000	a180	1914-16
Minersville Reservoir near Minersville, Ut (e)	10238500	534	1915-22 1937
Minersville Canal at Minersville, Ut (d)	10239500	---	1906 1914 1951-55
Beaver River at Minersville, Ut (d)	10240000	a560	1909-13 1951-55
Beaver River near Milford, Ut (d)	10241000	a1,100	1952-55
PAROWAN VALLEY			
Little Creek near Paragonah, Ut (d)	10241400	15.8	1960-80
Red Creek near Paragonah, Ut (d)	10241430	a6.3	1965-75
Center Creek above Parowan Creek near Parowan, Ut (d)	10241470	11.6	1965-87
Center Creek near Parowan, Ut (d)	10241500	a60	1943-50
Summit Creek near Summit, Ut (d)	10241600	24.0	1965-87
CEDAR CITY VALLEY			
Ashdown Creek near Cedar City, Ut (d)	10241800	13.1	1958-61
Grassy Creek near Enterprise, Ut (d)	10242430	a2.5	1965-68
SNAKE VALLEY			
Snake Creek near Baker, Nv (d)	10243230	a30	1913-15
Baker Creek at Narrows near Baker, Nv (d)	10243240	16.4	1947-55
Baker Creek near Baker, Nv (d)	10243250	a10	1913-15
Lehman Creek near Baker, Nv (d)	10243260	a11	1947-55
SNAKE RIVER VALLEY			
George Creek near Yost, Ut (d)	13077700	7.84	1959-89
Clear Creek near Naf, Id (d)	13079000	20.2	1910-11 1944-70

Explanation:

a : approximate  
q : includes 255 sq mi in closed basin in Cedar Valley  
DS : downstream  
US : upstream

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 1990 water year. Daily records of (b) microbiological, (c) chemical and/or specific conductance, (s) sediment, or (t) water temperature were collected and published for the record shown for each station.

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
COLORADO RIVER BASIN				
Cottonwood Wash at I-70 near Cisco, Ut	09163675	170	c, s, t	1983-86
TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER				
Onion Creek above Onion Creek Bridge near Moab, Ut	09180920	---	c, t	1980-81
Onion Creek below Onion Creek Bridge near Moab, Ut	09180970	---	c, t	1980-81
Castle Creek above diversions, near Moab, Ut	09182000	7.58	c, t	1971-75
Courthouse Wash near Moab, Ut	09183000	162	c, t	1971-89
Indian Creek Tunnel near Monticello, Ut	09185800	---	c, t	1971-80
Indian Creek below Bogus Pocket near Monticello, Ut	09187550	262	c, s, t	1983-88
GREEN RIVER BASIN				
East Fork Beaver Creek near Lonetree, Wy	09227000	a8.2	c, s, t	1977
Sheep Creek Upper Canal near Manila, Ut	09231000	---	c	1976
Red Creek near Dutch John, Ut	09234700	140	c, s, t	1971-76
Crouse Creek near Vernal, Ut	09235100	30.2	c, t	1987-90
Pot Creek near Vernal, Ut	09235800	107	c, t	1971-82
ASHLEY CREEK BASIN				
Brush Creek above cave near Vernal, Ut	09261500	a23	c, t	1950-73
Big Brush Creek near Vernal, Ut	09262000	79.6	c, t	1908-81
Little Brush Creek near Vernal, Ut	09263000	a28	c	1950
Brush Creek near Jensen, Ut	09263500	255	c	1988-89
Oaks Park Canal near Vernal, Ut	09265000	---	c	1957
Ashley Creek above Red Pine Creek near Vernal, Ut	09265300	55.8	c, t	1971-75
Dry Fork above sinks, near Dry Fork, Ut	09268000	44.4	c, t	1954-75
North Fork of Dry Fork near Dry Fork, Ut	09268500	8.62	c, t	1955-89
Brownie Canyon above sinks, near Dry Fork, Ut	09268900	8.24	c, t	1971-89
East Fork of Dry Fork at mouth near Dry Fork	09269500	a18	c, t	1954
Dry Fork below springs near Dry Fork, Ut	09270000	97.4	c, t	1947-58
Dry Fork at mouth near Dry Fork, Ut	09270500	116	c, t	1954-89
Ashley Creek at Sign of the Maine, near Vernal, Ut	09271000	241	c, t	1947
				1949
				1955-58
				1973-74
Highline Canal below Mantle Gulch near Jensen, Ut	09271070	---	c, t	1971-72
River Irrigation Company Canal near Jensen, Ut	09271470	---	c, t	1971-72
Ashley Creek near Jensen, Ut	09271500	383	c, t	1947-51
				1954-58
				1971-83
				1986-89
DUCHESNE RIVER BASIN				
Duchesne Tunnel near Kamas, Ut	09272500	---	c, t	1972
Duchesne River at Provo River Trail near Hanna, Ut	09273000	a39	c	1954
				1957
Hades Creek near Hanna, Ut	09273500	a75	c	1951
				1956-57
				1960-62
Duchesne River (North Fork) near Hanna, Ut	09274000	a78	c, t	1988
West Fork Duchesne River below Dry Hollow near Hanna, Ut	09275000	43.8	c, t	1957
				1960
				1964
				1974-81
Wolf Creek above Rhoades Canyon near Hanna, Ut	09276000	10.6	c, t	1951
				1956-57
				1962
				1971-83
Duchesne River at Hanna, Ut	09277000	a230	c, t	1957-64
				1973
Rock Creek near Hanna, Ut	09278500	122	c, t	1957
				1974-83
				1987-88
Rock Creek below Miners Gulch near Hanna, Ut	09278700	133	c, t	1974-81
Duchesne River at Duchesne, Ut	09279500	a660	c, t	1941-43
				1946-74
Hobble Creek at Daniels Summit near Wallsburg, Ut	09280400	2.89	c, t	1971-83
Strawberry Reservoir near Soldier Springs, Ut	09282500	170	c	1949
				1957-58
Willow Creek near Soldier Springs, Ut	09285500	a44	t	1990
Strawberry River above Red Creek near Fruitland, Ut	09285700	363	c, t	1941
				1971-81
Red Creek near Fruitland, Ut	09286500	a89	c	1941
				1947-49
				1957-58
Currant Creek below Red Ledge Hollow near Fruitland, Ut	09287000	50.1	c, t	1951
				1956-57
				1962-64
				1971-83
Water Hollow near Fruitland, Ut	09287500	a14	c, t	1956-57
				1960-64
				1971-83
Red Creek below Currant Creek near Fruitland, Ut	09288100	297	c, t	1971-81
West Fork Avintaquin Creek near Fruitland, Ut	09288150	56.1	c, t	1971-83
Strawberry River at Duchesne (Theodore), Ut	09288500	1,066	c, t	1941
				1946-50
				1954-58
				1962-68
				1973-74
Sowers Creek near Duchesne, Ut	09288900	40.6	c, t	1971-83
Antelope Creek near Myton, Ut	09289000	a198	c	1941
				1949

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
DUCHESNE RIVER BASIN--Continued				
Lake Fork River below Taskeech Damsite near Mt Home, Ut	09291200	138	c,t	1977-83
Yellowstone River at mouth near Altonah, Ut	09293000	142	c,t	1977-81
Lake Fork River (below Forks) near Altonah, Ut	09293500	304	c,t	1949
				1977-81
Lake Fork River at Hwy 87 near Altamont, Ut	09293600	318	c,t	1977-81
Pigeon Water Creek near Altamont, Ut	09293700	95.5	c,t	1977-78
Lake Fork River near Upalco, Ut	09294000	427	c,t	1941
				1957-58
				1964-65
				1973
				1977-81
Lake Fork (Creek) near Myton, Ut	09294500	484	c,t	1941
				1947-48
				1951
				1973
				1977-81
Uinta River near Neola, Ut	09297000	163	c,t	1941
				1957-58
				1963-83
Uinta River near Whiterocks, Ut	09297500	218	c	1849
West Channel Uinta River below diversion works near Whiterocks, Ut	09297600	216	c,t	1977-81
East Channel Uinta River below diversion works near Whiterocks, Ut	09297700	215	c,t	1977-81
East Channel Uinta River at County Road Bridge near Whiterocks, Ut	09297800	253	c,t	1977-81
East Channel Uinta River at LaPoint Road near LaPoint, Ut	09297900	382	c,t	1977-82
Farm Creek near Whiterocks, Ut	09298000	14.9	c,t	1971-81
Whiterocks River below damsite near Whiterocks, Ut	09299400	110	c,t	1977-81
Whiterocks River below Farm Creek Canal near Whiterocks, Ut	09299600	120	c,t	1977-81
Whiterocks River 1 Mile East of Whiterocks, Ut	09299700	124	c,t	1977-81
Deep Creek at State Hwy 246 near LaPoint, Ut	09299900	72.2	c,t	1977-79
Uinta River at Fort Duchesne, Ut	09300500	557	c,t	1941
				1947-51
				1954-59
				1965-70
				1973
				1977-81
Dry Gulch near Neola, Ut	09301000	a67	c	1958
				1963-64
Dry Gulch near Fort Duchesne, Ut	09301200	469	c,t	1977-81
Uinta River at Randlett, Ut	09301500	1,064	c,s,t	1950
				1963
				1977-81
WHITE RIVER BASIN				
White River near Colorado State Line, Ut	09306395	3,680	c,s,t	1976-85
White River above Hells Hole Canyon near Watson, Ut	09306400	a3,700	c,s,t	1974-76
Hells Hole Canyon Creek at mouth near Watson, Ut	09306405	24.5	c,s,t	1975-76
				1979-82
Evacuation Creek above Missouri Creek near Dragon, Ut	09306410	100	c,s,t	1974-83
Evacuation Creek below Park Canyon near Watson, Ut	09306415	246	c,s,t	1974-75
Evacuation Creek at Watson, Ut	09306420	259	c,s,t	1948
				1974-77
Evacuation Creek near mouth near Watson, Ut	09306430	284	c,s,t	1974-83
White River below Southam Canyon near Watson, Ut	09306600	a4,030	c,s,t	1974-76
Southam Canyon Wash near Watson, Ut	09306605	2.5	c,s,t	1976
Southam Canyon Wash at mouth near Watson, Ut	09306610	8.3	c,s,t	1976
				1979-82
Asphalt Wash below Center Fork near Watson, Ut	09306620	94.4	c,s,t	1976
Asphalt Wash near mouth near Watson, Ut	09306625	97.5	c,s,t	1975-76
				1979-81
White River below Asphalt Wash near Watson, Ut	09306700	a4,130	c,s,t	1974-78
				1981-83
Bitter Creek above Dick Canyon near Watson, Ut	09306740	11.7	c,s,t	1974-78
Sweetwater Canyon below South Canyon near Watson, Ut	09306760	22.6	c,s,t	1974-78
Sweetwater Canyon Creek near mouth near Watson, Ut	09306780	124	c,s,t	1975-78
Bitter Creek near Bonanza, Ut	09306800	324	c,s,t	1971-83
				1987-88
Bitter Creek at mouth near Bonanza, Ut	09306850	398	c,s,t	1974-83
Sand Wash near Ouray, Ut	09306870	59.7	c,t	1976
				1979
				1980
Sand Wash at mouth near Ouray, Ut	09306872	71.1	c,s,t	1978-80
Coyote Wash near mouth near Ouray, Ut	09306878	228	c,s,t	1976-83
North Wash near Ouray, Ut	09306880	11.0	c,t	1980-81
Cottonwood Wash near mouth near Ouray, Ut	09306885	70.6	c,s,t	1977-81
White River at mouth near Ouray, Ut	09306900	5,120	b,c,s,t	1974-86
TRIBUTARIES BETWEEN DUCHESNE RIVER AND PRICE RIVER				
Green River near Ouray, Ut	09307000	a35,500	c,s,t	1950-52
				1958-66
Pariette Draw near Ouray, Ut	09307200	153	c,s,t	1975-84
Pariette Draw at mouth near Ouray, Ut	09307300	298	c,s,t	1975-84
				1987-91
Willow Creek above diversions near Ouray, Ut	09307500	297	c,s,t	1969-70
				1974-83
Hill Creek above Towave Reservoir near Ouray, Ut	09307800	89.7	c,s,t	1974-81
Hill Creek near mouth near Ouray, Ut	09307900	288	c,s,t	1975-81
Willow Creek near Ouray, Ut	09308000	897	c,s,t	1950-55
				1974-83
Minnie Maud Creek near Myton, Ut	09308500	32.0	c,t	1971-83
				1987-89
PRICE RIVER BASIN				
Fairview Ditch near Fairview, Ut	09309500	---	c	1958
Gooseberry Creek near Fairview, Ut	09309800	a7.51	c,t	1969-70
Boardinghouse Creek at mouth near Scofield	09310575	2.04	c,s,t	1982-84
Eccles Canyon near Scofield, Ut	09310600	5.5	b,c,s,t	1979-84
Price River near Scofield, Ut	09311500	a155	c,t	1962
				1969-70
				1979-80



## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
PRICE RIVER BASIN--Continued				
White River near Soldier Summit, Ut	09312500	52.8	c,t	1947-1957-58
Beaver Creek near Soldier Summit, Ut	09312700	26.1	c,t	1969-83
Willow Creek near Castle Gate, Ut	09312800	62.8	c,t	1969-83
Willow Creek at Castle Gate, Ut	09312900	77.4	b,c,s,t	1979-81
Spring Canyon below Sowbelly Gulch at Helper, Ut	09313040	23.0	c,s,t	1978-81
Price River near Helper, Ut	09313500	a530	c,t	1970
Coal Creek near Helper, Ut	09313965	25.3	b,c,s,t	1976-81
Soldier Creek below Mine near Wellington, Ut	09313975	17.7	b,c,s,t	1969
Dugout Creek near Sunnyside, Ut	09313985	5.8	b,c,s,t	1979-81
Price River below Miller Creek near Wellington, Ut	09314250	956	c,t	1969-83
Desert Seep Wash near Wellington, Ut	09314280	191	c,t	1969
Grassy Trail Creek at Sunnyside, Ut	09314340	40.1	b,c,s,t	1972-83
Horse Canyon near Sunnyside, Ut	09314374	12.5	b,c,s,t	1975-84
TRIBUTARIES BETWEEN PRICE RIVER AND SAN RAFAEL RIVER				
Saleratus Wash at Green River, Ut	09315500	a180	c	1947-48
Browns Wash near Green River, Ut	09316000	a75	c	1957
Floy Wash near Green Riv, Ut	09316100	56.6	c,s,t	1983-86
Candland Ditch near Mt Pleasant, Ut	09317500	---	c	1958
Crandall Canyon at mouth near Huntington, Ut	09317919	5.7	b,c,s,t	1976-84
Tie Fork Canyon near Huntington, Ut	09317920	11.7	b,c,s,t	1978-81
Huntington Creek near Huntington, Ut	09318000	187	b,c,s,t	1949
Larsen Tunnel near Ephraim, Ut	09320500	---	b	1978
Seely Creek near Orangeville, Ut	09324000	a150	c,t	1956-58
Cottonwood Creek above Straight Canyon near Orangeville, Ut	09324200	21.9	b,c,s,t	1978-81
Cottonwood Creek near Orangeville, Ut	09324500	208	c,s,t	1946
Cottonwood Creek near Castle Dale, Ut	09325000	261	c,t	1958-62
San Rafael River Above Ferron Creek near Castle Dale, Ut	09325100	a680	c,t	1975-78
Ferron Creek near Castle Dale, Ut	09327500	a210	c,t	1960-68
San Rafael River near Castle Dale, Ut	09328000	930	c,t	1974-78
San Rafael River at San Rafael Bridge Campground, nr Castle Dale, Ut	09328100	1,284	c,s,t	1948
DIRTY DEVIL RIVER BASIN				
Fremont River near Fremont, Ut	09329500	205	c,t	1975-76
Pine Creek near Bicknell, Ut	09329900	104	c,t	1971-80
Pleasant Creek near Caineville Ut	09330210	115	c,s,t	1969-72
Bull Creek near Hanksville, Ut	09330410	7.53	c,s	1975-76
Ivie Creek above diversions near Emery, Ut	09331500	a50	c,t	1983-91
Convulsion Canyon near Emery, Ut	09331850	21.6	c,s,t	1975-76
Quitcupah Creek near Emery, Ut	09331900	104	b,c,s,t	1980-84
Christiansen Wash near Emery, Ut	09331950	13.6	b,c,s,t	1978-81
Muddy Creek below I-70 near Emery, Ut	09332100	418	c,s,t	1978-84
Muddy Creek at Delta Mine near Hanksville, Ut	09332700	841	c,s,t	1973-87
Muddy Creek at mouth near Hanksville, Ut	09332800	1,552	c,s,t	1975-85
Dirty Devil River near Hanksville, Ut	09333000	a3,490	c,t	1975-80
Colorado River at Hite, Ut	09335000	a76,600	c,s	1975-76
ESCALANTE RIVER BASIN				
East Fork Boulder Creek near Boulder, Ut	09338000	21.4	c,t	1971-72
Escalante River at mouth near Escalante, Ut	09339500	a1,770	c	1951-53
SAN JUAN RIVER BASIN				
McElmo Creek near Bluff, Ut	09372200		c,t	1978-82
Spring Creek above diversions near Monticello, Ut	09376900	4.95	c,t	1971-72
North Creek above Ranger Station near Monticello, Ut	09378100	8.68	c,t	1980-83
Cottonwood Wash near Blanding, Ut	09378700	205	c,s,t	1968-83
COLORADO RIVER TRIBUTARIES BELOW GLEN CANYON DAM				
Mill Creek above study area near Glendale, Ut	09403620	4.81	c,t	1975-77
Thompson Creek below study area near Glendale, Ut	09403660	16.6	c,t	1976-77
VIRGIN RIVER BASIN				
North Fork Virgin River near Glendale, Ut	09405400	5.65	c,t	1973-78
North Fork Virgin River below Bulloch Canyon near Glendale, Ut	09405420	29.6	c,s,t	1974
North Fork Virgin River above Zion Narrows near Glendale, Ut	09405450	45.5	c,s,t	1983-86
LaVerkin Creek near LaVerkin, Ut	09406150	91.3	c,t	1979
Kanarra Creek at Kanarraville, Ut	09406300	9.85	c,t	1983-86
South Ash Creek below Mill Creek near Pintura, Ut	09406700	11.0	c,t	1987-91
Ash Creek above Toquerville, Ut	09407000	201	c,t	1971-82
West Field Ditch at Toquerville, Ut	09407150		c,t	1971-82
Ash Creek below West Field Ditch at Toquerville, Ut	09407200	201	c,t	1973-78
Virgin River near Hurricane, Ut	09408150	1,499	c,s,t	1973-82
Santa Clara River above Winsor Dam near Santa Clara, Ut	09410000	338	c,s,t	1967-91
Santa Clara River near Santa Clara, Ut	09410400	410	c,t	1962-72
Virgin River near St. George, Ut	09413500	3,961	c,s,t	1971-74

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
THE GREAT BASIN				
Great Salt Lake at AIC near Syracuse, Ut	10010300	---	c,t	1972
BEAR RIVER BASIN				
East Fork Bear River near Evanston, Wy	10010400	34.6	c,t	1973-83
Hilliard East Fork Canal near State Line near Evanston, Wy	10010500	---	c,t	1967
West Fork Bear River at Whitney Dam, near Oakley, Ut	10011200	a7.5	c,t	1973-79
West Fork Bear River below Deer Creek near Evanston, Wy	10011400	52.2	c,t	1965-67
Mill Creek at Utah-Wyoming State Line	10012000	a59	c,t	1973-83
Sulphur Creek below Reservoir near Evanston, Wy	10015900	69.2	c,t	1973-83
Yellow Creek near Evanston Wy	10017000	a80	c,t	1961
				1958-92
				1958
				1961
				1968
				1972-78
Bear River near Evanston, Wy	10019000	715	c,t	1967-68
Chapman Canal at State Line near Evanston, Wy	10019500	---	c,t	1957
				1967-68
				1972-83
Bear River near Woodruff, Ut	10020500	a870	c,t	1957-58
Woodruff Creek below reservoir near Woodruff, Ut	10020900	50.0	c,t	1961
Woodruff Creek near Woodruff, Ut	10021000	a65	c,t	1972-83
				1961
				1967-68
				1972-75
Bear River near Randolph, Ut	10026500	1,616	c,t	1943-92
Rock Creek near Fossil, Wy	10026800	49.0	c,t	1961
Bear River below Pixley Dam near Cokeville, Wy	10028500	2,032	c,t	1958
				1965-68
				1973-83
				1988-91
Muddy Creek above Mill Creek near Cokeville, Wy	10032700	20.7	c,t	1967-68
Mill Creek near Cokeville, Wy	10032800	8.07	c,t	1967-68
Smiths Fork at Cokeville, Wy	10035000	275	c,t	1984-85
Thomas Fork near Wyoming-Idaho state line	10041000	113	c,t	1949-92
Bear River at Harer, Id	10044000	2,839	c,t	1967-68
St. Charles Creek above Diversions near St. Charles, Id	10054600	17.4	c,t	1967-68
Bloomington Creek at Bloomington, Id	10058600	24.0	c,t	1961
				1967-68
				1973-83
Bear River at Pescadero, Id	10068500	3,705	c,t	1967-68
Eightmile Creek near Soda Springs, Id	10072800	22.6	c,t	1972-91
				1961
				1965-68
				1973-83
Bear River at Soda Springs, Id	10075000	3,972	c,t	1965-68
Cottonwood Creek near Cleveland, Id	10084500	61.7	c,t	1972-83
				1961
				1967-68
				1972-83
Mink Creek below Dry Fork near Mink Creek, Id	10087500	19.3	c,t	1961
Bear River near Preston (at Battlecreek), Id	10090500	4,545	c,t	1947
				1953
				1961
				1965-68
				1973-83
Deep Creek near Clifton, Id	10091200	107	c,t	1967-68
Cub River near Preston, Id	10093000	19.4	c,t	1972-78
				1958-61
				1967-68
				1972-83
East Branch Cub River Canal near Lewiston, Ut	10095900	---	c,t	1967-68
High Creek near Richmond, Ut	10099000	16.2	c,t	1978-83
Cub River near Richmond, Ut	10102200	a200	c,t	1987-89
				1959
Summit Creek above diversions near Smithfield, Ut	10102300	11.6	c,t	1967-68
South Fork Little Bear River near Avon, Ut	10104600	26.0	c,t	1972-79
Little Bear River below Davenport Creek near Avon, Ut	10104700	61.5	s	1967-68
East Fork Little Bear River above Reservoir near Avon, Ut	10104900	56.7	c,t	1972-74
				1986-91
				1967-68
				1972-83
Little Bear River near Paradise, Ut	10106000	203	c,t	1947
				1961
				1967-68
				1972-83
Little Bear River near Hyrum, Ut	10107500	222	c,t	1961
				1967-68
Little Bear River at Wellsville, Ut	10107600	245	c,t	1967-68
Logan River below Blacksmith Fork near Logan, Ut	10115200	524	c,t	1964-68
Blacksmith Fork below Mill Creek, near Hyrum, Ut	10111700	78	c,t	1972-80
				1965-69
				1985-92
West Canal above Salt Creek diversion near Tremonton, Ut	10117510	---	c,t	1979-83
West Canal below Salt Creek diversion near Tremonton, Ut	10117530	---	c,t	1979-83
Deep Creek below First Creek near Malad City, Id	10125000	a32	c,t	1967
Malad River near Plymouth, Ut	10125600	a632	c,t	1964-65
				1968
				1972-80
Bear River Duck Club near Bear River City, Ut	10125700	---	c,t	1967-68
Malad River below Bear River Duck Club Canal nr Bear River City, Ut	10125800	a698	c,t	1965-68
TRIBUTARIES TO GREAT SALT LAKE BETWEEN BEAR RIVER AND WEBER RIVER				
Sulphur Creek near Corrinne, Ut	10126180	15.4	c,t	1963-64
				1972-83
Salt Creek below Salt Spring near Tremonton, Ut	10127050	---	c,t	1979-83
Black Slough near Brigham City, Ut	10127100	31.1	c,t	1973-83
WEBER RIVER BASIN				
Smith and Morehouse Creek near Oakley, Ut	10128000	33.8	c,t	1975-83
				1987

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
WEBER RIVER BASIN--Continued				
South Fork Weber River near Oakley, Ut	10128200	a16	c,t	1971-74
Weber River near Peoa, Ut	10129300	296	c,t	1971-77
Crandall Creek near Peoa, Ut	10129350	11.8	c,t	1971-73
East Fork Chalk Creek near Coalville, Ut	10130700	a35	c,t	1972-74
Threemile Creek near Park City, Ut	10133700	2.68	c,t	1971-74 1983
East Canyon Creek near Park City, Ut	10133900	68.9	c,t	1983
North Fork Ogden River near Eden, Ut	10137680	6.03	c,t	1971-74
Middle Fork Ogden River above diversion near Huntsville, Ut	10137780	31.3	c,t	1971-74
Ogden River near Ogden, Ut	10139500	321	c,t	1988
Hooper Slough near Hooper, Ut	10141040	13.0	c,t	1975 1979-83
South Fork Weber Canal near Hooper, Ut	10141050	---	c,t	1972-75
South Fork Weber River near Hooper, Ut	10141100	---	c,t	1972-75
North Fork Weber River near Hooper, Ut	10141200	---	c,t	1972-76
TRIBUTARIES TO GREAT SALT LAKE BETWEEN WEBER RIVER AND JORDAN RIVER				
Howard Slough at Hooper, Ut	10141400		c,s,t	1972-84
Farmington Creek above div near Farmington, Ut	10142000	10.0	c,t	1978-81
JORDAN RIVER BASIN				
Salt Creek at Nephi, Ut	10146000	95.6	c,t	1971-80 1988
Nebo Creek near Thistle, Ut	10148400	36.7	c,t	1971-73
Spanish Fork at Thistle, Ut	10148500	450	c,t	1971-74
Spanish Fork below Halls Falls near Thistle, Ut	10148510	452	c,t	1983-92
Spanish Fork near Lakeshore, Ut	10152000	675	b,c,t	1971-83 1988
Hobble Creek near Springville, Ut	10152500	105	c,t	1971-74
Maple Creek near Mapleton, Ut	10152700	3.13	c,t	1971-72
Provo River near Kamas, Ut	10153500	29.6	c,t	1972
Shingle Creek near Kamas, Ut	10154000	a8.4	c,t	1971-73
North Fork Provo River at Wildwood, Ut	10160800	12.3	c,t	1971-74
Dry Creek near Alpine, Ut	10165500	9.82	c,t	1971 1980-81
Jordan River Station No. 1 at Narrows, Ut	10167001		c,s,t	1980-83
East Jordan Canal at Little Cottonwood Creek near Sandy, Ut	10167105	---	c	1980
East Jordan Canal at pumphouse at 6200 So near Murray, Ut	10167115	---	c,s,t	1980-81
Upper Canal at 5800 South (Tolcate Ln) near Murray, Ut	10167122		c,t	1980
Upper Canal at Wild Rose Ln near Salt Lake City, Ut	10167125		c,s,t	1980-81
Jordan & Salt Lake Canal at Little Cottonwood Creek near SLC, Ut	10167141	---	c,t	1980-81
Jordan & Salt Lake Canal at Zenith Ave near Salt Lake City, Ut	10167149	---	c,s,t	1980
Jordan River at 9400 South near South Jordan, Ut	10167200	3,130	c,s,t	1965-68
Bells Canyon Conduit 1000 East 110000 South	10167220	---	c,s,t	1981-82
Jordan River at 90th South near Midvale, Ut	10167230	a3,130	c,s,t	1980-83 1986-89
90th South Conduit at Jordan River near Midvale, Ut	10167240		b,c,s,t	1980-82
Jordan River at 5800 South near SLC, Ut	10167300	3,254	b,c,s,t	1965-68 1974-83
Little Cottonwood Creek (channel) near SLC, Ut	10167499		c,s,t	1979-88
Little Cottonwood Creek at 2050 East near SLC, Ut	10167700	35.2	c,t	1973-75 1980
Little Cottonwood Creek at Jordan River near SLC, Ut	10168000		c,s,t	1979-82 1987-88
Big Cottonwood Creek (Cottonwood Creek) near SLC, Ut	10168500	50.0	c,s,t	1964-70
Big Cottonwood Creek at 5550 South near SLC, Ut	10168800	57.3	c,s,t	1964 1980-89
Neffs Creek above Wasatch Boulevard near SLC, Ut	10168832	---	c,s,t	1981
Big Cottonwood Creek at Jordan River near SLC, Ut	10169500		b,c,s,t	1980-81
Mill Creek near Salt Lake City, Ut	10170000	21.7	b,c,s,t	1964-68 1979
Mill Creek at Jordan River near SLC, Ut	10170250	a32	b,c,st	1979-82
Parleys Creek at Suicide Rock near SLC, Ut	10171600	50.7	b,c,s,t	1964-68 1979-81
Emigration Creek near Salt Lake City, Ut	10172000	18.4	b,c,s,t	1964-68 1980-81
Red Butte Creek below reservoir near SLC, Ut	10172220	7.95	c,t	1980-81
1300 South Conduits at Jordan River, combined flows	10172350		b	1981
City Creek above Wasatch Drive, near SLC, Ut	10172400	17.0	c,s,t	1964-68
Jordan River at 5th North at SLC, Ut	10172550		b,c,s,t	1968-70 1975
Jordan River at Cudahay Lane near SLC, Ut	10172600	q3,590	b,c,t	1980-84 1963
Goggin Drain near Magna, Ut	10172630	---	c,t	1973-79 1964-66
Lee Creek near Magna, Ut	10172640		c,t	1972-84
Kennecott Drain near Magna, Ut	10172650	---	c,s,t	1972-82 1962-66
North Willow Creek near Grantsville, Ut	10172805	5.38	c,t	1972-84 1979-92
GREAT SALT LAKE DESERT				
Great Salt Lake West Pond near Wendover, Ut	10172903	---	c,t	1988-90
West Locomotive Spring at Locomotive Spring near Snowville, Ut	10172963	---	c,t	1973-75
Baker Spring at Locomotive Spring near Snowville, Ut	10172964	---	c,t	1969-70 1973-75
Bar M Spring at Locomotive Spring near Snowville, Ut	10172965	---	c,t	1969-70 1973-80
Off Spring at Locomotive Spring near Snowville, Ut	10172967	---	c,t	1969-70 1973-80
Sparks Spring at Locomotive Spring near Snowville, Ut	10172968	---	c,t	1969-70 1973-80
SEVIER LAKE BASIN				
Midway Creek near Hatch, Ut	10173600	25.7	c	1974
Sevier River at Hatch, Ut	10174500	340	c,s,t	1985-92
Panguitch Creek near Panguitch, Ut	10176300	97.0	c,t	1971-80
Antimony Creek near Antimony, Ut	10185000	50.3	c,t	1971-76
Otter Creek near Koosharem, Ut	10187300	23.5	c,t	1971-82

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record
SEVIER LAKE BASIN--Continued				
Otter Creek above Reservoir near Antimony, Ut	10187500	322	c,t	1971-80
Clear Creek at Sevier, Ut	10195000	169	c,t	1988-89
Mill Creek near Glenwood, Ut	10204200	18.9	c,t	1973
Sheep Creek near Salina, Ut	10205100	0.30	c	1985
Oak Creek near Fairview, Ut	10208500	11.8	c,t	1971-89
Pleasant Creek near Mount Pleasant, Ut	10210000		c,t	1971-75
San Pitch River near Sterling, Ut	10216210	672	c,t	1971-80
Twelvemile Creek near Mayfield, Ut	10216400	59.4	c,t	1971-80
Oak Creek below big Spring near Oak City, Ut	10224300	17.8	c,t	1979-83
Chalk Creek near Fillmore, Ut	10232500	58.7	c,t	1985
Meadow Creek near Meadow, Ut	10233000	11.6	c,t	1944
				1971-75
Corn Creek near Kanosh, Ut	10233500		c,t	1985
				1944
				1964
				1971-75
				1985
South Creek near Beaver, Ut	10235000	14.7	c,t	1965
				1971-76
North Fork North Creek near Beaver, Ut	10236000	14.1	c,t	1972-77
South Fork North Creek near Beaver, Ut	10236500	23.0	c,t	1971-76
Indian Creek near Beaver, Ut	10237500	18.5	c,t	1965
				1971-77
Indian Creek at Adamsville, Ut	10238000	a180	c,t	1964
PAROWAN VALLEY				
Little Creek near Paragonah, Ut	10241400	15.8	c,t	1971-80
Red Creek near Paragonah, Ut	10241430	a6.3	c,t	1971-75
Center Creek above Parowan Creek near Parowan, Ut	10241470	11.6	c,t	1971-83
Summit Creek near Summit, Ut	10241600	24.0	c,s,t	1971-83
SNAKE RIVER VALLEY				
George Creek near Yost, Ut	13077700	7.84	c,t	1965-67
				1972-90
Clear Creek near Naf, Id	13079000	20.2	c,t	1965-67

## Explanation:

a : approximate





## INTRODUCTION

Water resources data for the 1993 water year for Utah consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground water. This report contains discharge records for 187 gaging stations; stage and contents for 23 lakes and reservoirs; water quality for 23 hydrologic stations, and 185 wells; and water levels for 45 observation wells. Additional water data were collected at various sites not involved in the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Utah.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1969, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels and Artesian Pressures in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia, 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report UT-93-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

Additional information, including current prices, for ordering specific reports may be obtained from the District Office at the address given on the back of the title page or by telephone (801) 975-3350. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

## COOPERATION

The U.S. Geological Survey and organizations of the State of Utah have had cooperative agreements for the systematic collection of streamflow records since 1909, for ground-water levels since 1935, and for water-quality records since 1941. Organizations that assisted in collecting data through cooperative agreement with the Geological Survey are:

Department of Natural Resources, Ted Stewart, Executive Director  
Division of Water Rights, R. L. Morgan, State Engineer  
Division of Water Resources, D. L. Anderson, Director  
Utah Geological and Mineral Survey, M. L. Allison, State Geologist  
Division of Wildlife Resources, T. H. Provan, President  
Bear River Commission, Charles J. Heringer, Chairman  
Salt Lake County Flood Control, James Bradley, Chairman  
National Park Service, Dan B. Kimball, Acting Chief  
Weber Basin Water Conservancy District, Wayne B. Gibson  
Tooele City, Gerald Webster  
Ogden River Water Users, James Randall  
Weber River Water Users, D. Earl Harris  
Central Utah Water Conservancy District, Don Christiansen

Assistance in the form of funds was given by the Bureau of Reclamation, U.S. Department of the Interior, in collecting records for 6 gaging stations and by the Bureau of Land Management, U.S. Department of the Interior, for 4 gaging stations. Records for 10 gaging stations in Idaho in the Bear River basin and 8 in Utah were collected by the Utah Power and Light Co. under Federal Energy Regulatory Commission License.

Other district offices of the Geological Survey, Water Resources Division, obtained the records listed below:

Colorado District.--Colorado River near Colorado-Utah State line.

Wyoming District.--Bear River at Evanston, WY  
Blacks Fork near Millburne, WY  
Blacks Fork near Robertson, WY  
East Fork of Smiths Fork, near Robertson, WY  
Green River near Green River, WY  
Henrys Fork near Manilla, UT

Records for all stream-gaging stations operated by the Geological Survey in the Bear River basin in Utah, Idaho, and Wyoming are included in this report.

Organizations that supplied data are acknowledged in station descriptions.

## WATER RESOURCES DATA FOR UTAH, 1993

## SUMMARY OF HYDROLOGIC CONDITIONS

by David V. Allen

Hydrologic conditions in Utah can vary greatly across the state because of topography, geology and changing seasonal atmospheric conditions. Annual precipitation ranges from about 5 inches in the Great Salt Lake Desert to about 60 inches on the highest mountains (Butler and Marsell, 1972). Pacific frontal storms generally occur during winter and early spring and are responsible for the mountain snowpack. Snowpack usually increases with elevation, and storm accumulations of more than 12 inches of snow are common at elevations greater than 8,000 feet above sea level. Thunderstorms are most common during summer months and can vary greatly in areal extent and intensity. Flooding can occur as a result of snowmelt or thunderstorms.

Precipitation in Utah during the 1993 water year was greater than normal (1961-90) at 8 of 11 selected precipitation-recording stations operated by the National Oceanic and Atmospheric Administration (National Oceanic and Atmospheric Administration, 1992 and 1993) in Utah (fig. 1). Of the 11 sites, Zion National Park recorded the largest amount of precipitation for the water year with 23.18 inches, or 150 percent of normal, and Callao recorded the least with 4.83 inches, or 79 percent of normal (table 1). January was the wettest month with 10 of the 11 sites recording greater-than-normal precipitation, and total departure from normal of +19.13 inches. Record monthly precipitation amounts for January were recorded at Green River, Salt Lake City, and Zion National Park. February was also a very wet month, with a total departure from normal of +11.26 inches, and included record precipitation at Green River and the second wettest February ever recorded at Zion National Park. September was the driest month with all 11 sites recording less-than-normal precipitation and a total departure from normal of -8.14 inches. Generally wetter-than-normal conditions from October through June alleviated many of the effects of below-normal precipitation that had persisted in the northern part of the state since 1986.

Table 1. Precipitation and departure from normal precipitation at selected sites for water year 1993

[In inches; upper number indicates precipitation; lower number (in parentheses) indicates precipitation departure from 1961-90 normal precipitation; T, trace; e, estimated from partial record]

Site	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July*	Aug*	Sept*	Total Departure
Black Rock	1.24 (+0.46)	T (-0.77)	0.71 (+0.12)	1.76 (+1.26)	1.18 (+0.70)	0.77 (-0.35)	0.18 (-0.80)	1.12 (+0.34)	1.14 (+0.60)	0.52 (-0.34)	1.19 (+0.36)	0.21 (-0.65)	10.02 (+0.93)
Bluff	0.88 (-0.18)	0.47 (-0.30)	1.15 (+0.40)	3.41 (+2.70)	2.25 (+1.58)	0.64 (-0.63)	0.22 (-0.26)	0.67 (+0.26)	0.00 (-0.23)	0.00 (-0.92)	1.47 (+0.64)	0.36 (-0.37)	11.52 (+3.29)
Callao	0.50 (-0.16)	0.05 (-0.29)	0.18 (-0.10)	1.54e (+1.25)	0.70 (+0.37)	0.84 (+0.43)	0.09 (-0.38)	0.12 (-0.69)	0.21 (-0.52)	0.31 (-0.22)	0.11 (-0.55)	0.18 (-0.42)	4.83 (-1.28)
Cedar City	1.63 (+0.68)	0.09 (-0.91)	1.07 (+0.37)	2.49 (+1.80)	2.00 (+1.11)	0.95 (-0.41)	0.97 (-0.13)	0.54 (-0.30)	0.74 (+0.31)	0.29 (-0.80)	0.29 (-1.18)	0.04 (-0.94)	11.10 (-0.40)
Green River	0.77 (-0.12)	0.29 (-0.16)	0.71 (+0.30)	1.79** (+1.39)	1.42** (+1.10)	0.95 (+0.36)	0.37 (-0.13)	1.03 (+0.40)	0.08 (-0.32)	0.05 (-0.52)	0.47 (-0.28)	0.11 (-0.68)	8.04 (+1.34)
Hanksville	0.84 (+0.16)	0.05 (-0.36)	0.47 (+0.16)	1.25 (+0.87)	0.66 (+0.41)	0.31 (-0.20)	0.24 (-0.18)	0.97 (+0.48)	0.07 (-0.23)	0.11 (-0.43)	0.38 (-0.35)	0.07 (-0.67)	5.42 (-0.34)
Logan	2.14 (+0.27)	2.09 (+0.36)	1.71 (-0.01)	1.16 (-0.24)	1.19 (-0.46)	2.35 (+0.33)	3.18 (+1.03)	2.32 (+0.28)	2.42 (+0.85)	2.79 (+2.01)	0.78 (-0.19)	0.37 (-1.25)	22.50 (+2.98)
Nephi	1.61 (+0.35)	1.84 (+0.45)	1.83e (+0.50)	2.89 (+1.70)	2.20 (+1.01)	2.45 (+0.74)	0.59 (-0.92)	1.67 (+0.29)	1.25 (+0.40)	0.29 (-0.55)	1.54 (+0.53)	0.36 (-0.82)	18.52 (+3.68)
Salt Lake City	1.03 (-0.41)	2.46 (+1.17)	1.07 (-0.33)	3.23** (+2.12)	1.35 (+0.12)	1.37 (-0.54)	1.54 (-0.58)	3.99 (+2.19)	1.14 (+0.21)	1.38 (+0.57)	0.46 (-0.40)	0.22 (-1.06)	19.25 (+3.07)
Vernal	1.00 (-0.06)	0.61 (+0.01)	0.71e (+0.08)	0.76 (+0.34)	0.96 (+0.55)	1.90 (+1.25)	0.83 (+0.02)	1.05 (+0.17)	0.77 (-0.02)	0.26 (-0.24)	0.85 (+0.27)	0.49 (-0.38)	10.19 (+1.99)
Zion National Park	2.30 (+1.38)	0.00 (-1.46)	1.99 (+0.71)	7.53*** (+5.94)	6.37 (+4.77)	2.10 (+0.05)	0.17 (-0.98)	0.82 (-0.02)	0.02e (-0.46)	0.00 (-1.25)	1.78 (-0.01)	0.10 (-0.90)	23.18 (+7.77)
Total Departure	+2.37	-2.26	+2.20	+19.13	+11.26	+1.63	-3.31	+3.40	+0.59	-2.69	-1.16	-8.14	

\* Data provided by Utah State Climatologist's Office, Utah State University.

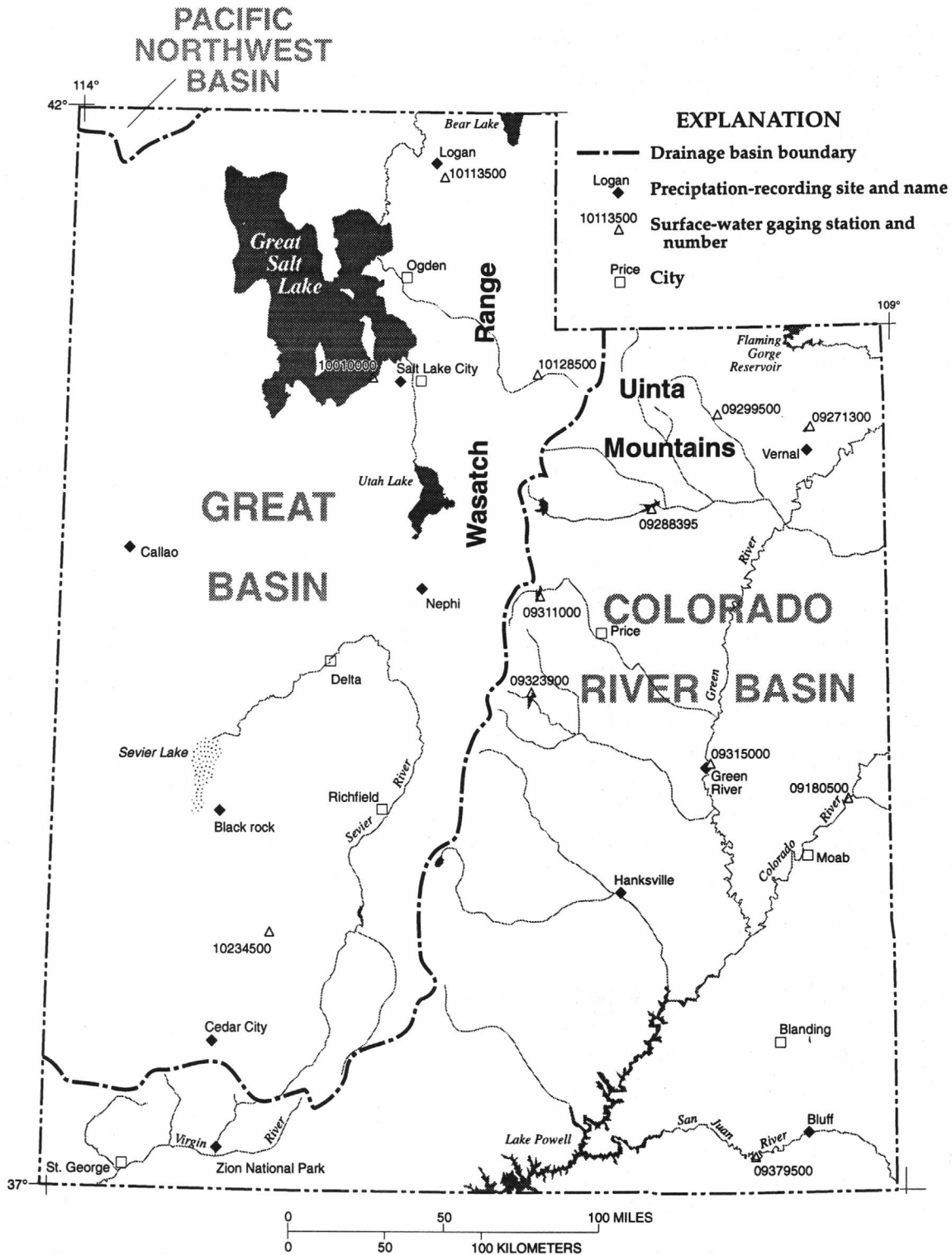
\*\* Record for month.

\*\*\* Record for any month.

Monthly mean discharge at seven long-term, representative gaging stations (fig. 1) was less than the monthly median (1944-92) discharge for October through December at all stations except for San Juan River near Bluff, Utah (09379500), which was slightly greater than the median for November and December (fig. 2). Record minimum discharges were recorded at two sites during the water year. Discharge at Blacksmith Fork above Utah Power and Light Company's dam, near Hyrum, Utah (10113500), continued at record minimum flows after the 1992 water year, setting new record minimums for October (42.6 cubic feet per second) and November (41.2 cubic feet per second). Weber River near Oakley, Utah (10128500), set a new record minimum flow for October at 33.8 cubic feet per second. Mean monthly discharge for March at San Juan River near Bluff, Utah (09379500) was 5,731 cubic feet per second, which is the greatest monthly mean discharge recorded for March since 1944 and is exceeded only by 6,209 cubic feet per second recorded in the 1916 water year.

Discharge at Colorado River near Cisco, Utah (09180500), San Juan River near Bluff, Utah, and Beaver River near Beaver, Utah (10234500) increased from less-than or near-normal to greater-than-normal during the spring and summer months because of greater-than-normal precipitation during the winter and spring. Statewide, spring runoff was much higher than it had been since 1986 any may have led to a significant increase in drowning deaths in rivers and streams in Utah in 1993. Data from the Bureau of Vital Records and Health Statistics for Utah indicate that during 1986-92, an average of 7 deaths per year on rivers and streams were attributed to drowning as the primary or secondary cause of death; from January 1 through November 30, 1993, 14 deaths on rivers and streams were attributed to drowning as a primary or secondary cause of death. (Levy, 1994)

Combined reservoir contents on September 30, 1993, from 15 selected reservoirs in Utah averaged 76 percent of the long-term (1961-90) average-usable-contents\*. This was a substantial increase over the combined contents at the end of water year 1992, which was 30 percent. The largest percent of capacity was at Echo Reservoir at Echo, Utah (10131500), with 166 percent, and the smallest was at Steinkaker Reservoir near Vernal, Utah (09271300), which was drawn down to 7 percent of capacity for dam rehabilitation. Storage in Bear Lake in northern Utah peaked at about 557,000 acre-feet on July 10-11, which is about 33,000 acre-feet more than the peak for the 1992 water year (524,000 acre-feet) and 54 percent of the long-term average contents (1,027,400 acre-feet). Minimum storage in Bear Lake was 204,000 acre-feet from November 1-10, 1992; the least since April 30, 1936.



**Figure 1.** Precipitation-recording sites and surface-water gaging stations.



Great Salt Lake reached a maximum daily mean elevation for the 1993 water year of 4,202.1 feet above sea level on June 16, (fig. 3) which was 0.2 foot lower than the peak elevation for the 1992 water year (4,202.3 feet). Fluctuations in the level of Great Salt Lake occur because of changes in the rates of freshwater inflow and evaporation outflow. The level of Great Salt Lake normally reaches its peak between late April and early June, and its lowest elevation normally occurs between late September and early December. The minimum elevation for the 1993 water year was 4,199.6 feet above sea level on October 26 and 28, 1992.

Seven wells (fig. 4) were selected to show trends in ground-water levels for water years 1984-93. The wells are in Curlew Valley, Pahvant Valley, the Beryl-Enterprise area, Salt Lake Valley, and the Vernal and Blanding areas. For the 1993 water year, water-level hydrographs (fig. 5) show declines in Curlew, Pahvant and Salt Lake Valley, generally no change in the Beryl-Enterprise and Vernal areas, and a large rise in the Blanding area. Declines are a result of increased pumping for irrigation in Curlew and Pahvant Valleys and for public supply in Salt Lake Valley. The rise in the Blanding area was a result of increased availability of surface water for recharge. The water level in well (D-3-1)2ccc-1 in Sandy, reached a new record minimum on October 25-31, 1992 at 596.0 feet below land surface, which is -0.77 foot lower than the previous recorded minimum of 595.23 feet set on September 30, 1992. The water level in this well has declined about 40 feet since the 1985 water year, and has set successive minimum water-level records each year since the 1987 water year.

Long-term water-quality data are collected at 10 National Stream-Quality Accounting Network (NASQAN) and Benchmark stations in Utah (fig. 6). Dissolved-solids concentration for the streams (fig. 7) decreased in all sites from water year 1992 to 1993, except for Jordan River at 1700 South, near Salt Lake City, Utah (10171000), and Sevier River near Lynndyl, Utah (10224000), which both showed slight increases. The number of samples per year varied by site and by water year, and ranged from 4 to 28, and mean annual dissolved-solids concentrations were not adjusted for discharge.

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Butler, Elmer, and Marsell, R.E., 1972, Cloudburst floods in Utah, 1939-69: Utah Division of Water Resources Cooperative Investigations Report 11, 103 p.

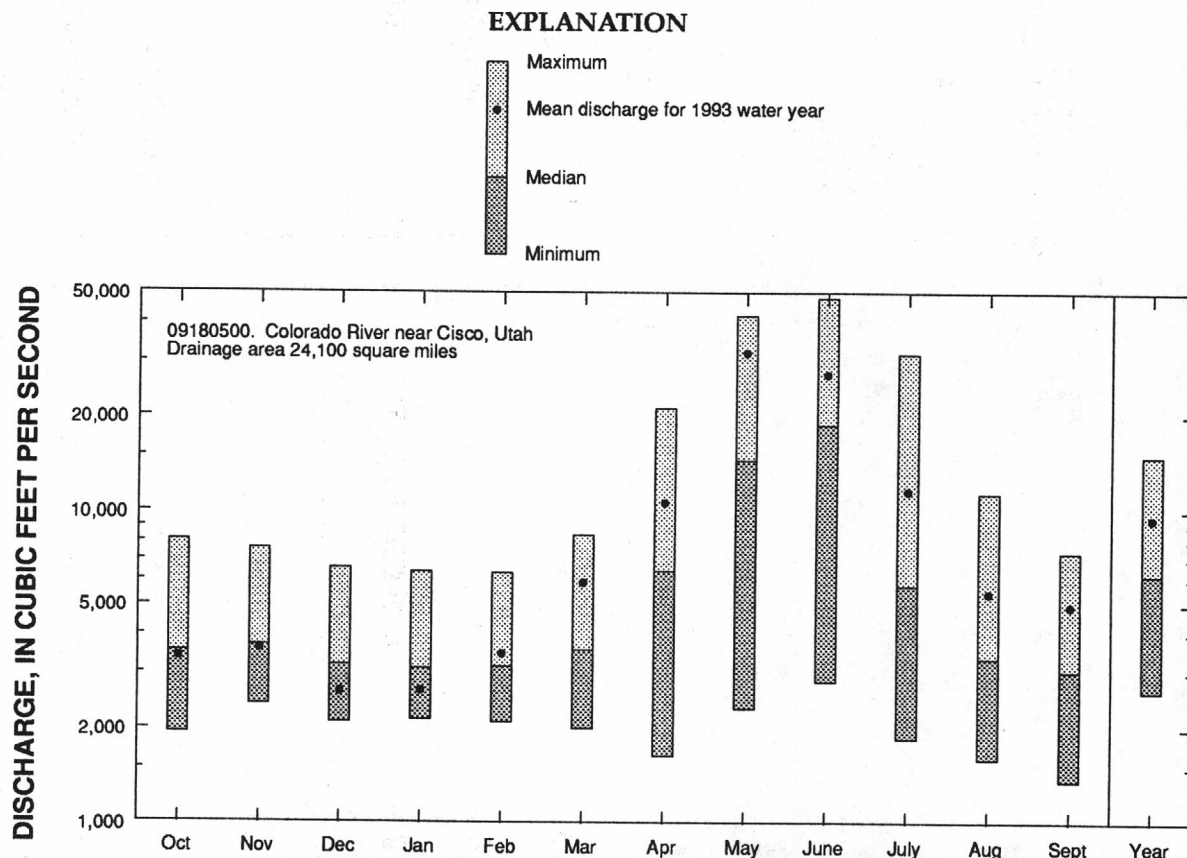
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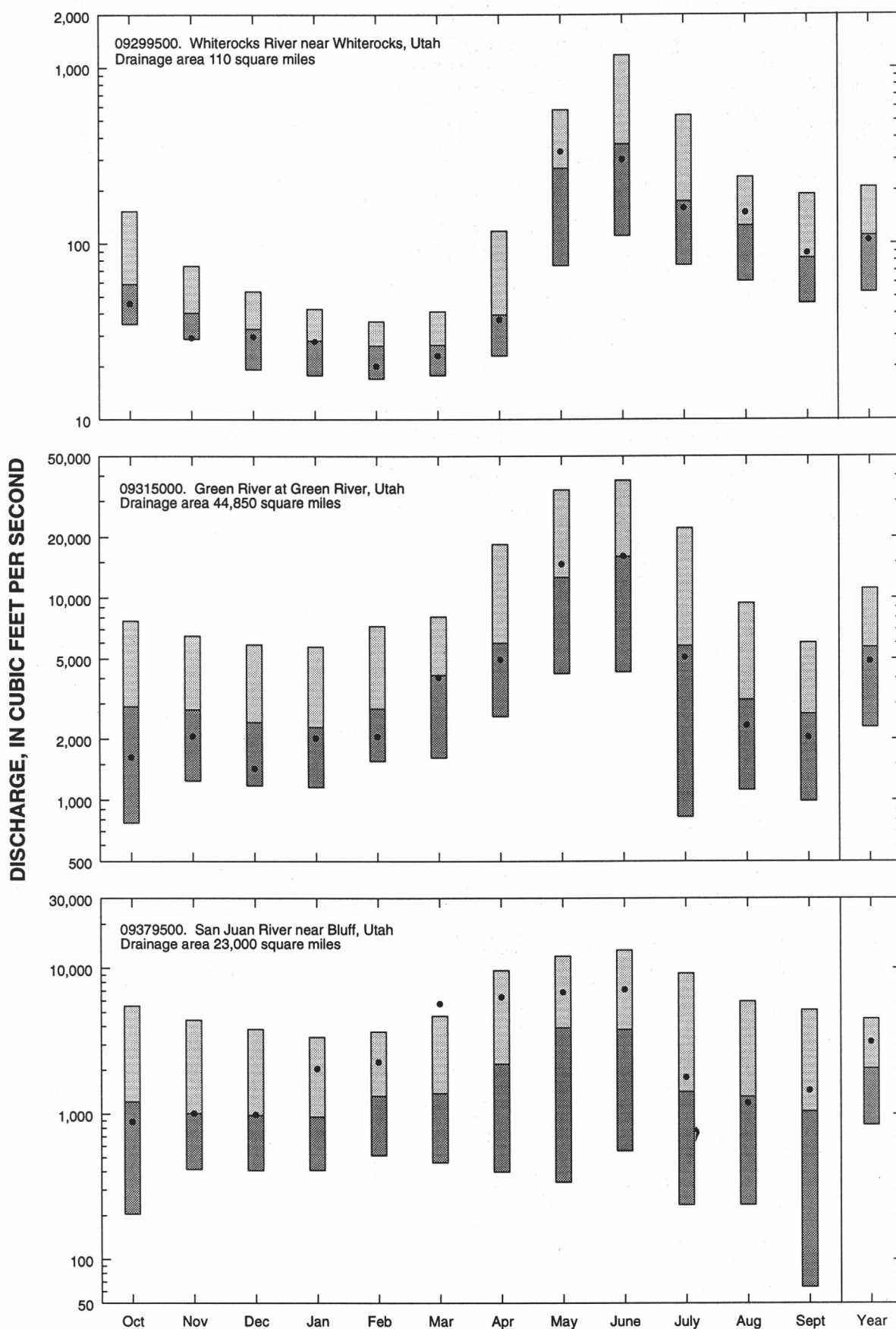
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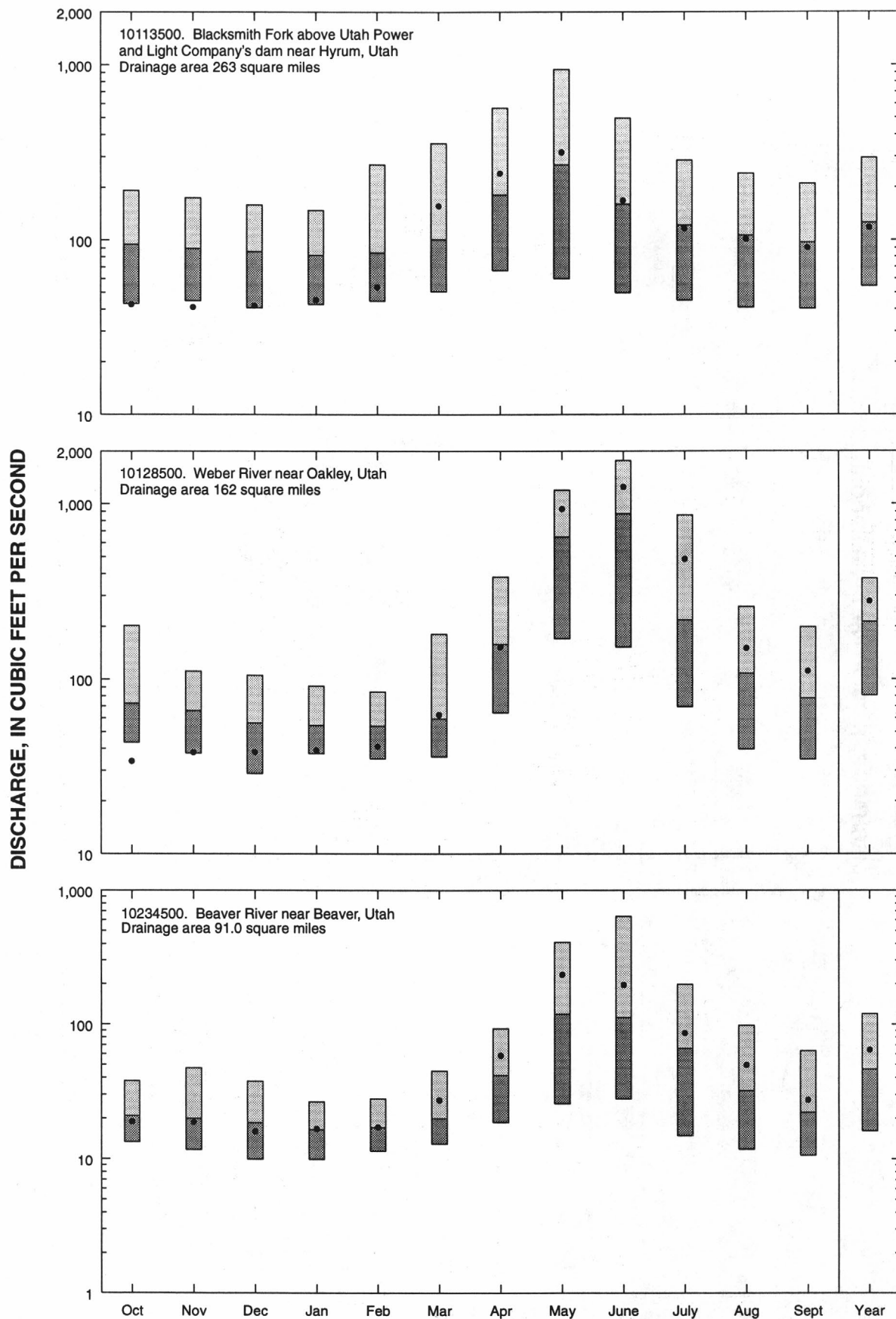
\*Long-term averages provided by National Oceanic and Atmospheric Administration. Averages for East Canyon (1966-90), Joes Valley (1966-90), Starvation (1970-90), and Steinaker (1975-90) Reservoirs are calculated on the basis of the water years shown in parentheses.



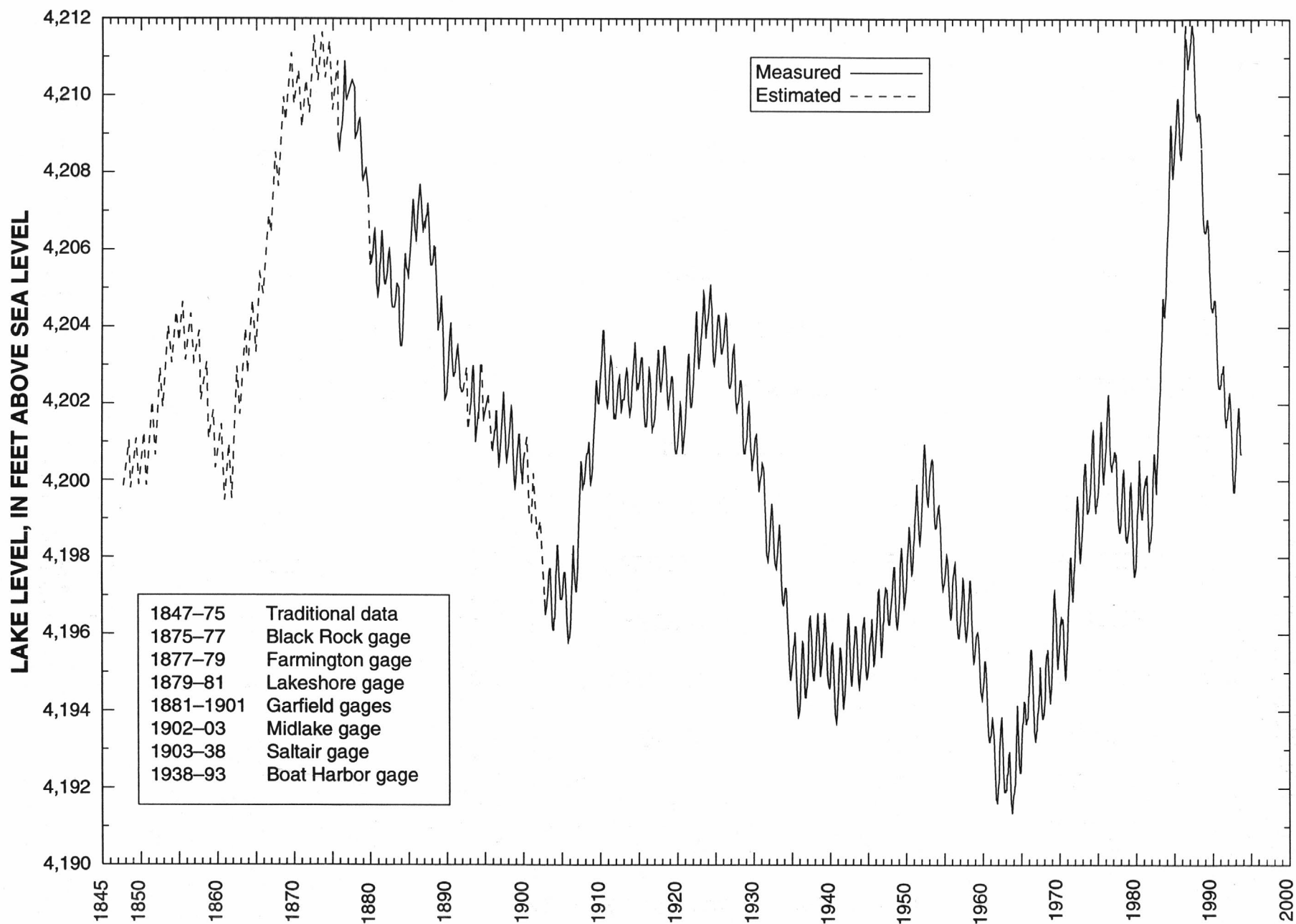
**Figure 2.** Comparison of monthly and annual mean discharge for water year 1993 with maximum, median, and minimum monthly and annual discharge for water years 1944-92 at seven long-term, representative streamflow gaging stations in Utah.



**FIGURE 2.** Comparison of monthly and annual mean discharge for water year 1993 with maximum, median, and minimum monthly and annual discharge for water years 1944-92 at seven long-term, representative streamflow gaging stations in Utah—Continued.



**Figure 2.** Comparison of monthly and annual mean discharge for water year 1993 with maximum, median, and minimum monthly and annual discharge for water years 1944-92 at seven long-term, representative streamflow gaging stations in Utah—Continued.



**Figure 3.** Fluctuations in elevation of Great Salt Lake, 1845–1993.



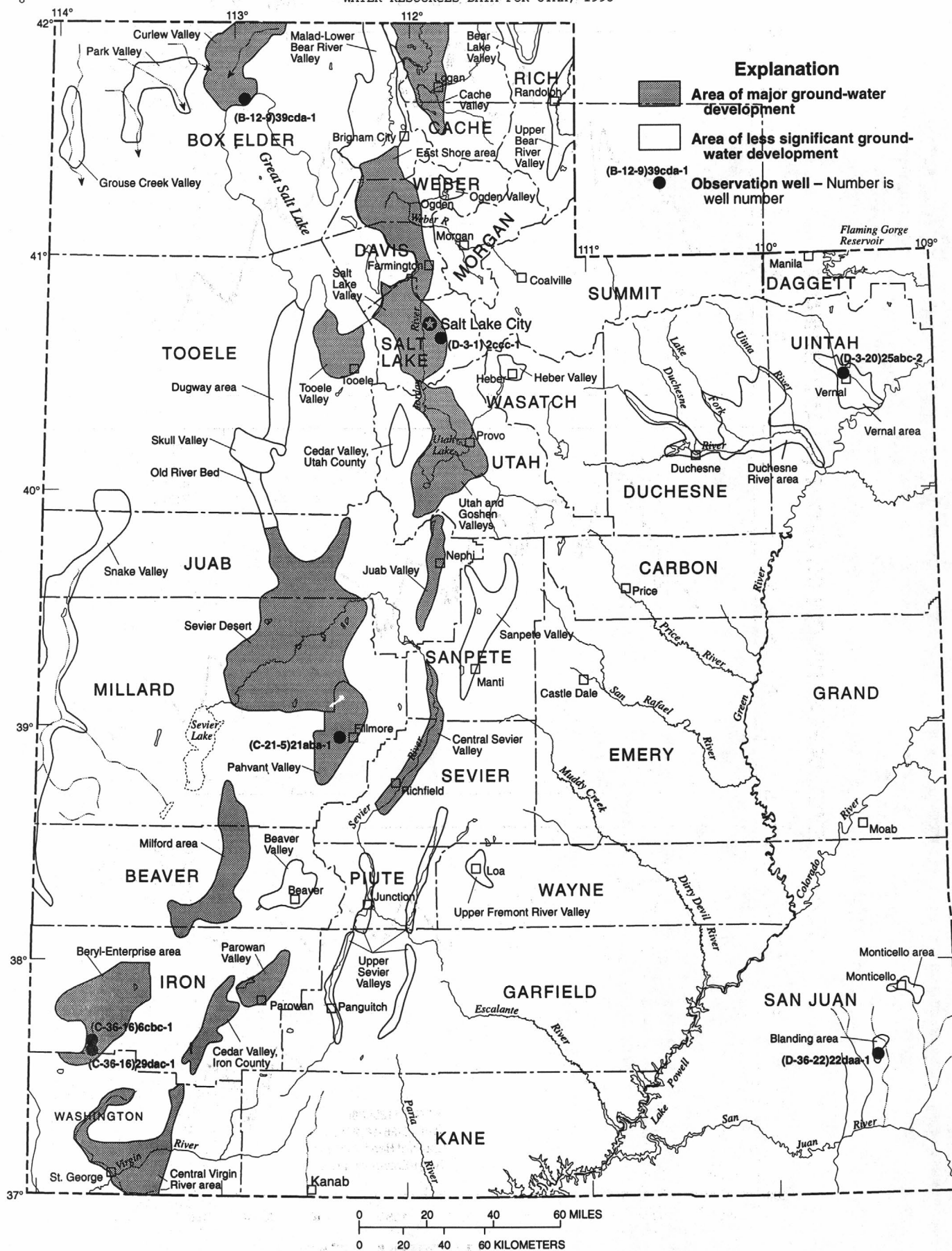


Figure 4. Areas of ground-water development and location of selected observation wells.

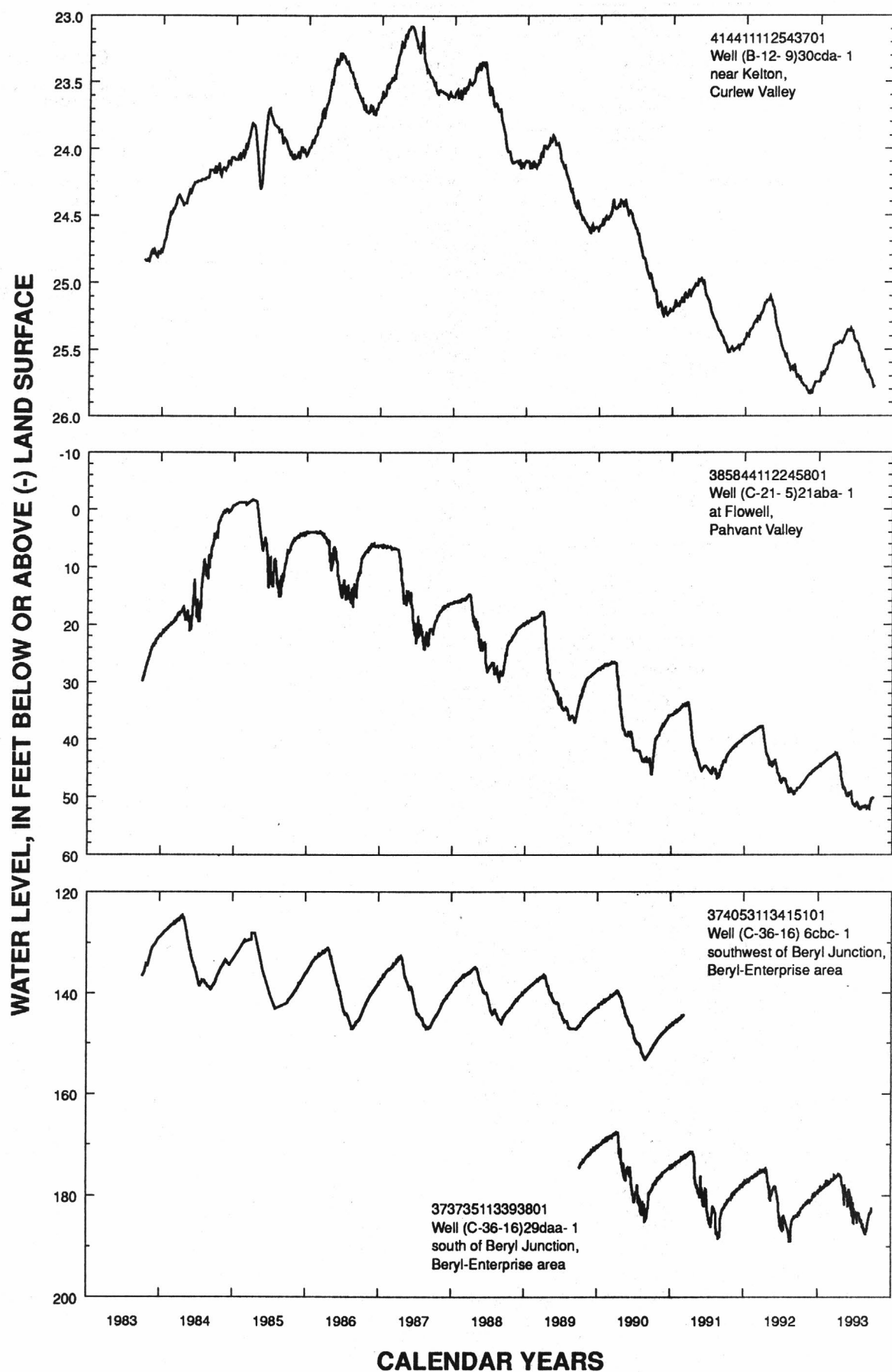


Figure 5. Fluctuations of water levels in selected wells in Utah for water years 1984-93.

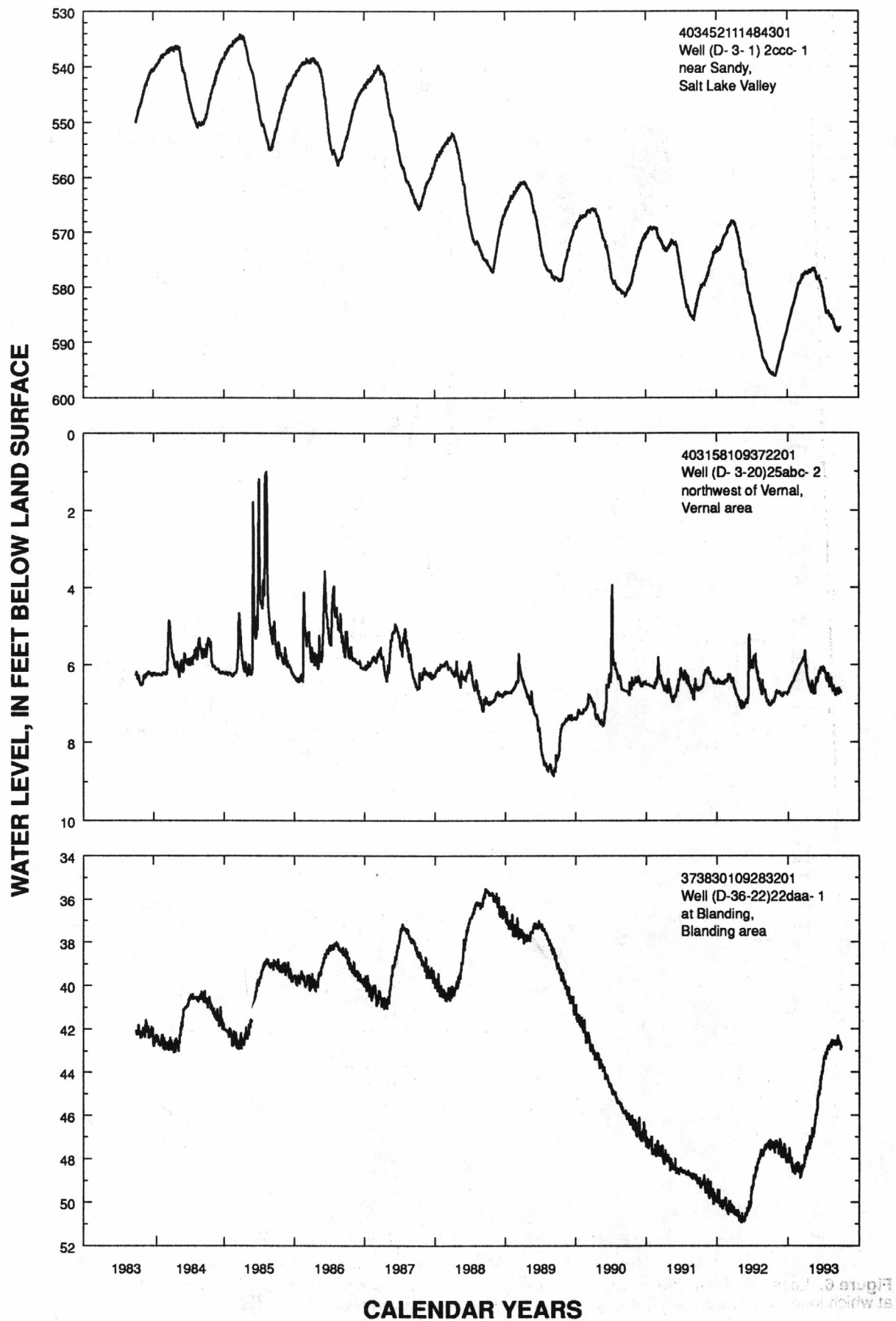
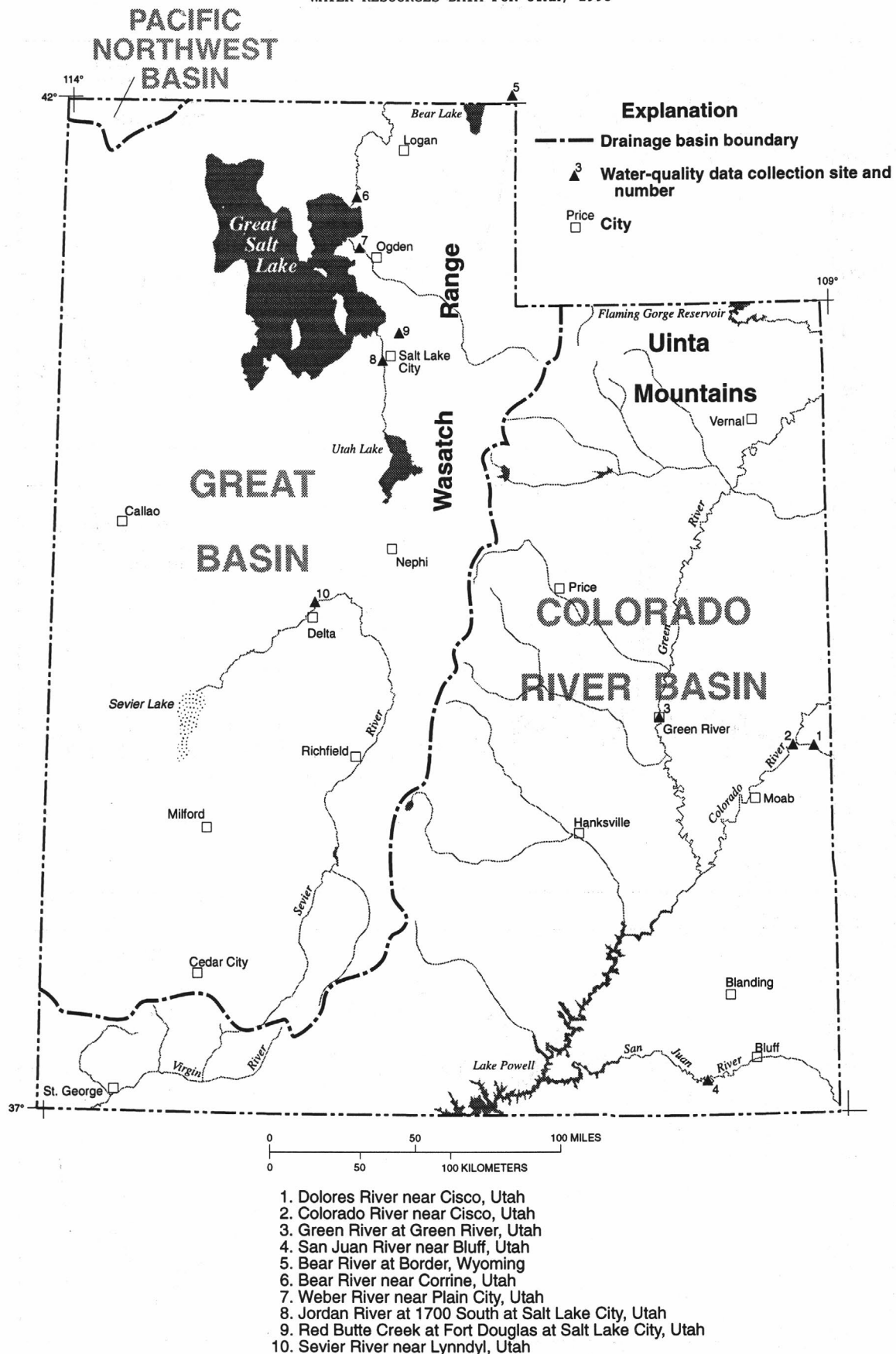


Figure 5. Fluctuation of water levels in selected wells in Utah for water years 1984-93--Continued.



**Figure 6.** Location of ten National Stream-Quality Accounting Network (NASQAN) and bench mark gaging stations at which long-term water-quality data have been collected.



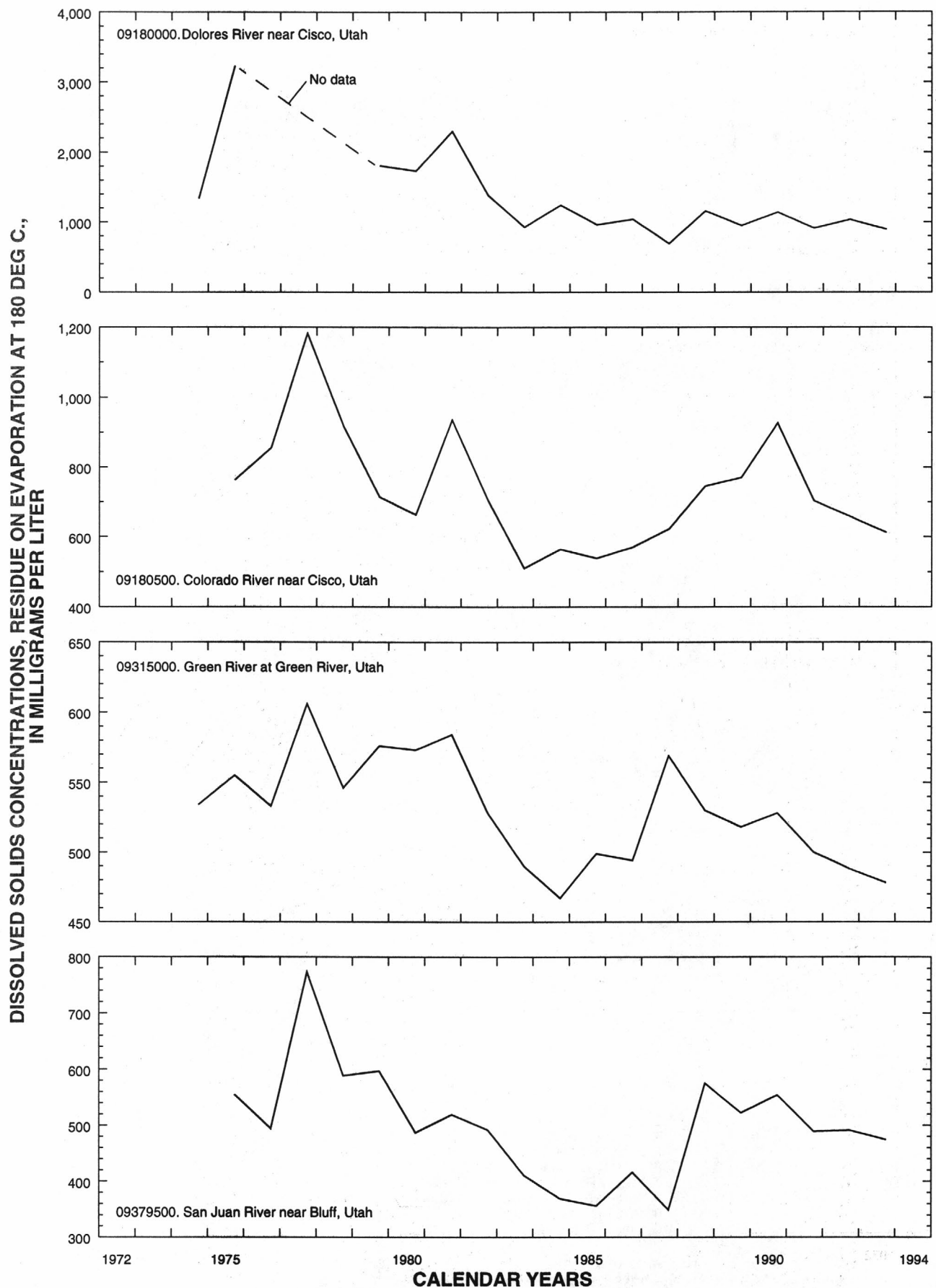
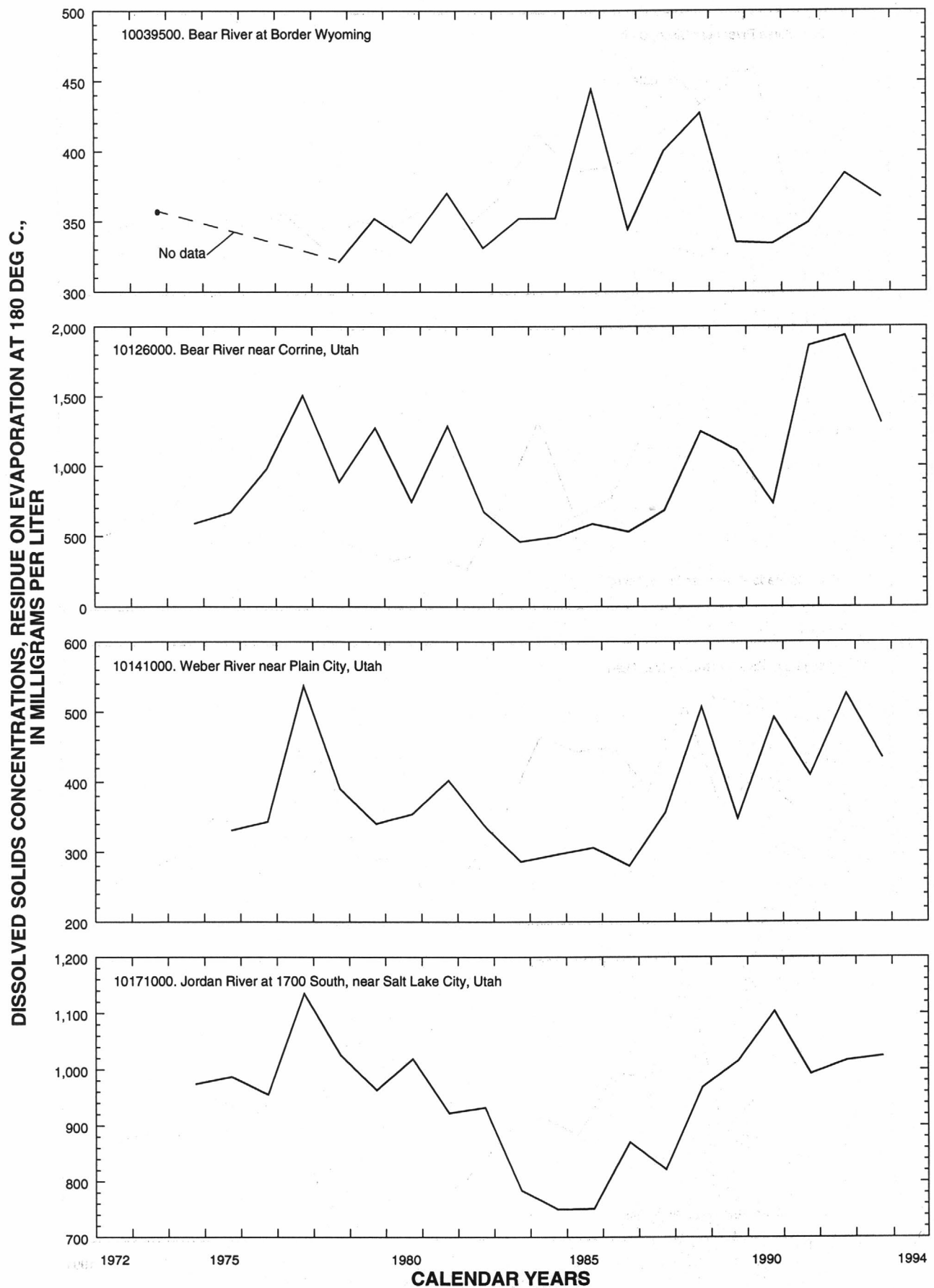


Figure 7. Mean annual dissolved-solids concentrations for water years 1973-93 at ten long-term, representative gaging stations.



**Figure 7.** Mean annual dissolved solids concentrations for water years 1973-93 at ten long-term, representative gaging stations—Continued.

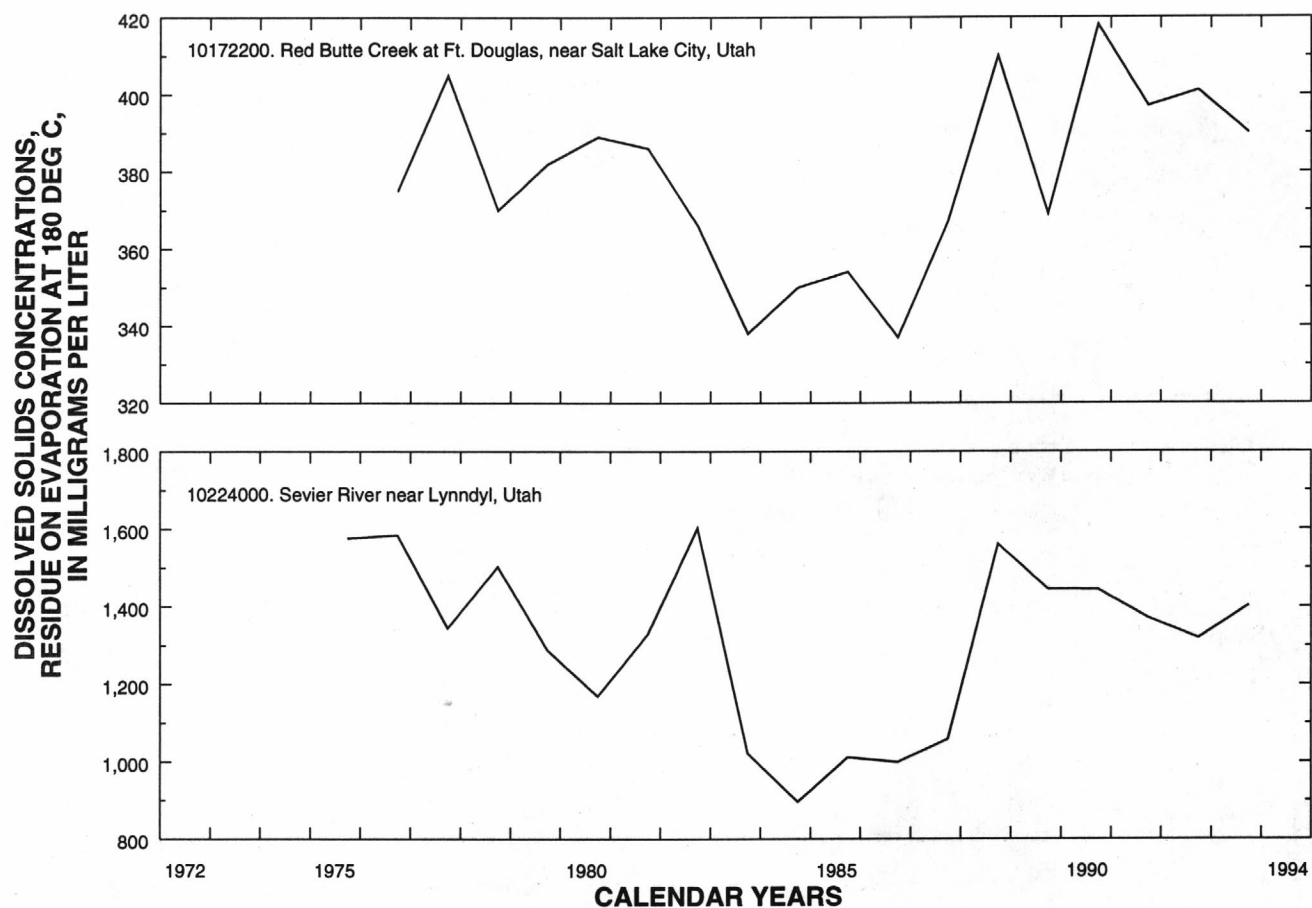


Figure 7. Mean annual dissolved-solids concentrations for water years 1973-93 at ten long-term, representative gaging stations—Continued.

## DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting English units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at  $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$  on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms which produce red or pink colonies within 48 hours at  $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$  on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter micro-organisms, such as bacteria.

Chemical-oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (Ft<sup>3</sup>/s, ft<sup>3</sup>/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 - March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge" and so on.

Dissolved refers to that material in a representative water sample which passes through a  $0.45\ \mu\text{m}$  membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or non-contributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Epilimnion is the uppermost region of a stratified lake which is characterized as having water of nearly uniform temperature, and dissolved oxygen concentrations generally near saturation.

Eutrophic is a condition in which the water in the lake, pond, or reservoir is enriched with plant nutrients such as nitrogen and phosphorus which results in large amounts of plant and algal production. As the plants and algae die and sink to the bottom, an organic sediment is created which removes oxygen from the water as it decays.

Eutrophication is the natural process of enrichment and aging of a body of water that may be accelerated by the activities of man. Pertains to water bodies in which primary production of high because of a large supply of available nutrients.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.



Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ( $\text{CaCO}_3$ ).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Hypolimnion is the lower region of a stratified lake which is characterized as having water with cooler temperatures, and low to very low concentrations of dissolved oxygen.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Meso-eutrophic is intermediate stage in lake classification between the oligotrophic and eutrophic stages, in which primary production occurs at a greater rate than in oligotrophic lakes, but at a lesser rate than in eutrophic lakes. This is due to a moderate supply of nutrients.

Micrograms per liter ( $\mu\text{g/L}$ ,  $\mu\text{g/L}$ ) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter ( $\text{mg/L}$ ,  $\text{mg/L}$ ) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in  $\text{mg/L}$ , and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "MEAN SEA LEVEL."

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agree with recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay . . . . .	0.00024 - 0.004	Sedimentation
Silt . . . . .	.004 - .062	Sedimentation
Sand . . . . .	.062 - 2.0	Sedimentation or sieve
Gravel . . . . .	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population in terms of types, numbers mass or volume.

Picocurie (PC, pCi) is one trillionth ( $1 \times 10^{-12}$ ) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Sea level in this report refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture ( $\text{mg/L}$ ).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration ( $\text{mg/L}$ )  $\times$  discharge ( $\text{ft}^3/\text{s}$ )  $\times$  0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at  $25^\circ\text{C}$ . Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water, per unit of time, flowing in a channel.

Stratification is a natural process in which bodies of standing water become colder near the bottom and warmer near the surface. The two layers are separated by a thinner middle layer characterized by a rapidly changing temperature profile.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "Streamflow" uniquely describes the discharge in surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimeted. All areas shown are those for the stage when the planimeted map was made.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 m membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/l of the constituent, times the factor 0.0027, times the number of days.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1993, is called the "1993 water year".

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

#### DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of stations in the front of the report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in a series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 03041000, which appears just to the left of the station name, includes a 2-digit part number "03" plus the 6-digit downstream order number "041000."

#### NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site number system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, assign sequential numbers "01," "02," etc. as one would for wells. See figure 8.

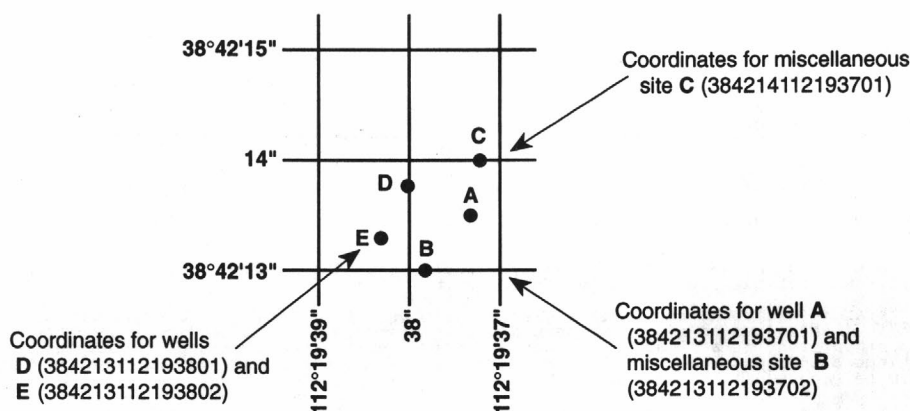


Figure 8. System for numbering wells and miscellaneous sites (latitude and longitude).

In addition to the well number that is based on latitude and longitude given for each well, another well number is given that is based on the U.S. Bureau of Land Management's system of land subdivision. This well number is familiar to the water users of Utah and shows the location of the well by quadrant, township, range section, and position within the section. See figure 9. The capital letter at the beginning of the location number indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian--A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction beginning with (a) in the northeast quarter of the section. Letters are assigned within each quarter section and quarter-quarter section in the same manner. Where two or more locations are within the smallest subdivision, consecutive numbers beginning with 1 are added to the letters in the order in which the wells are inventoried. For example, (C-16-9)15daa-2 indicates a well in the northeast quarter of the northeast quarter of the southeast quarter of sec. 15, T.16 S., R.9 W., and shows that this is the second well inventoried in the quarter-quarter-quarter section. The capital letter C indicates that the township is south of the Salt Lake Base Line and that the range is west of the Salt Lake Meridian.

In addition to the Salt Lake Base Line and Salt Lake Meridian, which apply to most of Utah, the Uintah Base Line and Meridian are the basis for describing locations in a small, irregularly shaped area of north-eastern Utah. The quadrants, townships, ranges, sections, and parts of sections are designated in the same way as for the Salt Lake Base Line and Meridian. For any location in the Uintah area, however, the letter "U" precedes the parenthesis.

#### SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is a network of sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analysis on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National stream-quality accounting network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nations rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

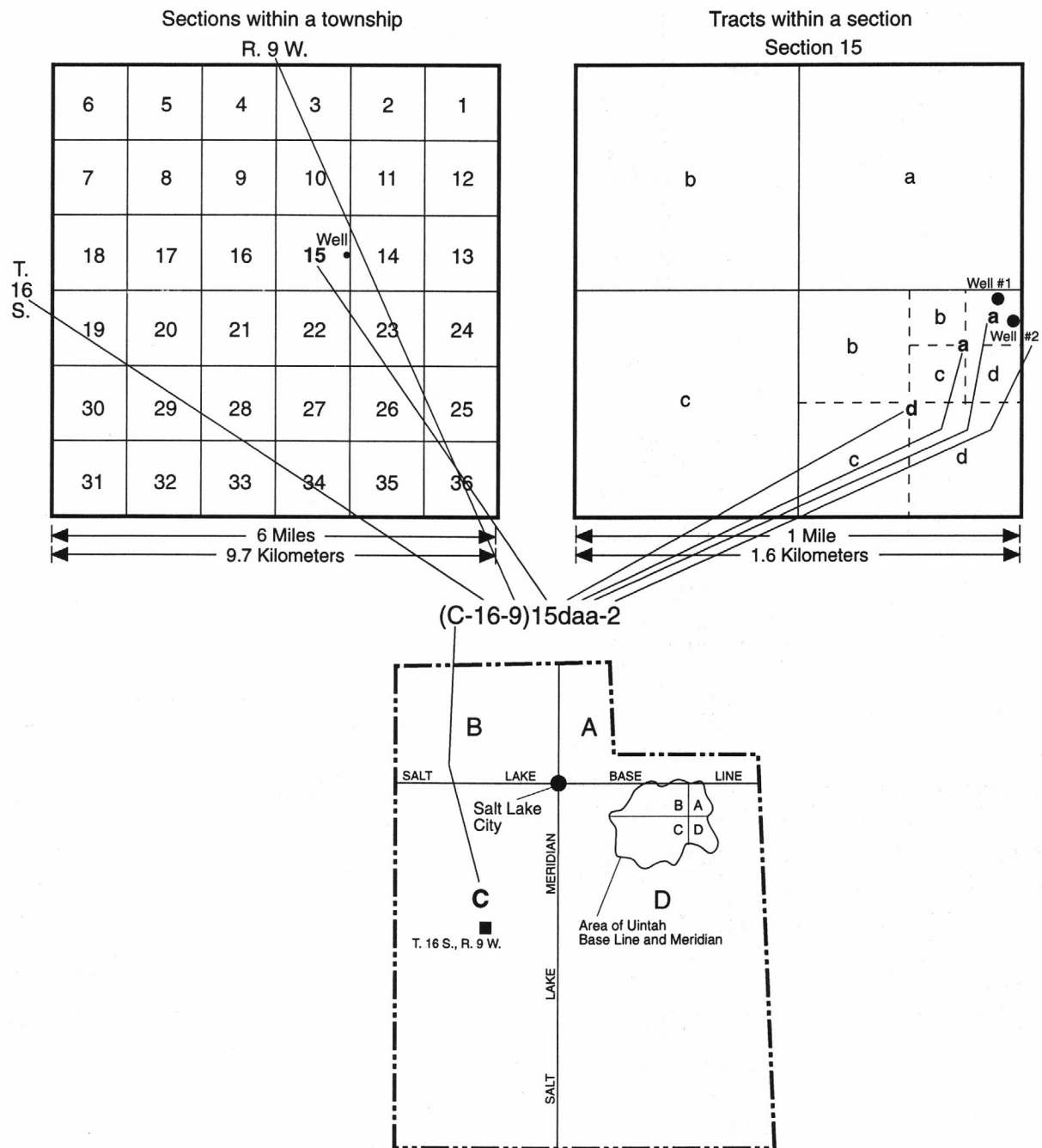
Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

#### EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

##### Collection and Computation of Data

The base data collected at gaging stations (fig. 10) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, Book 3, Chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.



**Figure 9.** System for numbering wells (township and range).



At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

#### Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

#### Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

**LOCATION.**--Information on locations is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

**DRAINAGE AREA.**--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

**PERIOD OF RECORD.**--This indicates the period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that flow at it can reasonably be considered equivalent to flow at the present station.

**REVISED RECORDS.**--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

**GAGE.**--The type of gage in current use, the datum of the current gage referred to sea level (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

**REMARKS.**--All periods of estimated daily discharge will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

**COOPERATION.**--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

**REVISIONS.**--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.



Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given. No changes have been made to the data presentations of lake contents.

#### Data table of daily mean values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM") or in inches (line headed "IN"); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

#### Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS - , BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

#### Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly daily and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS - , " will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year.

ANNUAL MEAN.--The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of tile page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

#### Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

#### Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as discharge measurements, gage-height records, and rating tables is available from the district office. Also, most gaging-station records are available in computer-usable form and many statistical analysis have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

### EXPLANATION OF WATER-QUALITY RECORDS

#### Collection and Examination of Data

Surface-water samples for analyses usually are collected at or near gaging stations (fig. 11). The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, etc.); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, or other pertinent data are given in the table containing the chemical analyses of the ground water.

#### Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values for each constituent measured, and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record.

#### REMARK CODES

The following remark codes may appear with the water-quality data in this section:

PRINTED OUTPUT	REMARK
E	Estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptable range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.

NOTE: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Present data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey will begin using new trace-element protocols in water year 1994.

Historical and current dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

#### Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once daily, the water temperatures are taken at about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum and minimum temperatures for each day are published.

#### Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections. During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment data were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the streams.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

#### Accuracy of Laboratory analysis

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L gave a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Sulfate values in this report have not been corrected for this bias.

### EXPLANATION OF GROUND-WATER LEVEL RECORDS

#### Collection of the Data

Only ground-water level data from selected wells with continuous recorders from a basic network of observation wells are published herein (fig. 12). This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs (see figures 9 and 10).

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth of water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

#### ACCESS TO WATSTORE DATA

The National WATER Data STorage and RETrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey as its National Center in Reston, Virginia, and consists of related files and data bases.

- \* Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- \* Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- \* Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- \* Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- \* Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

U.S. Geological Survey  
National Water Data Exchange  
421 USGS National Center  
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District office. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado, 80225.

**PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS**

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficken, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
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- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
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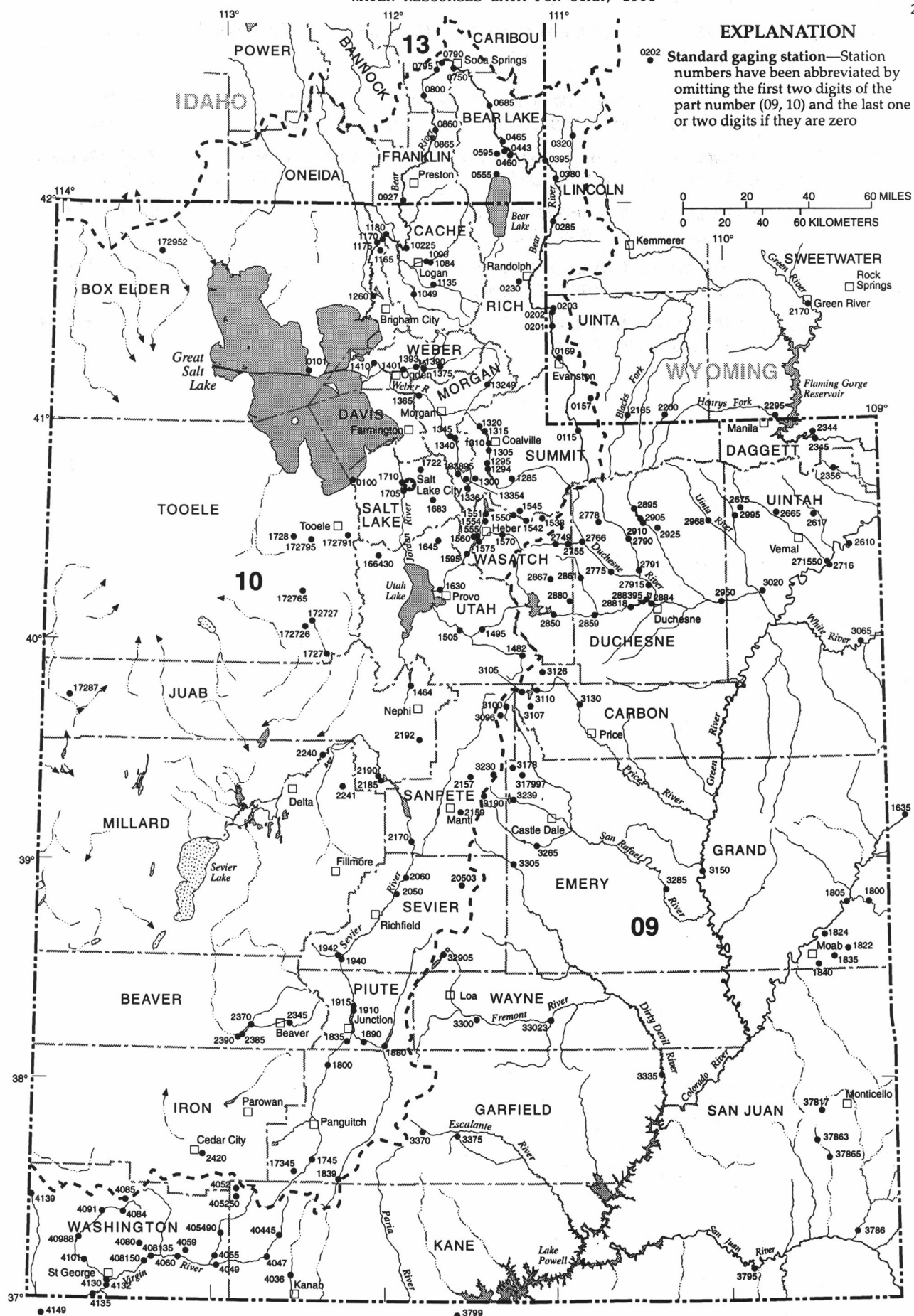
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- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
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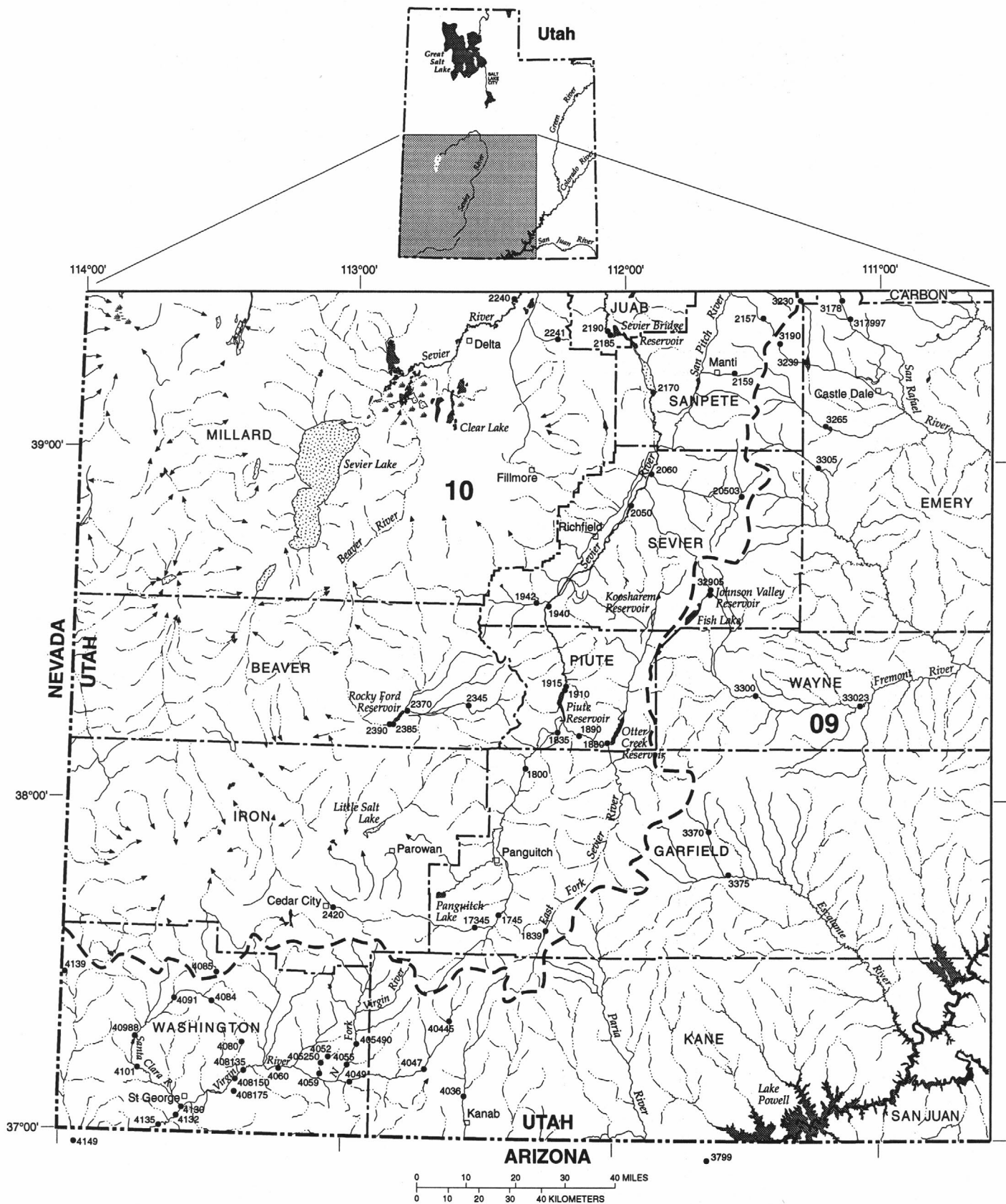


Figure 10. Map showing location of gaging stations in Utah—Continued.

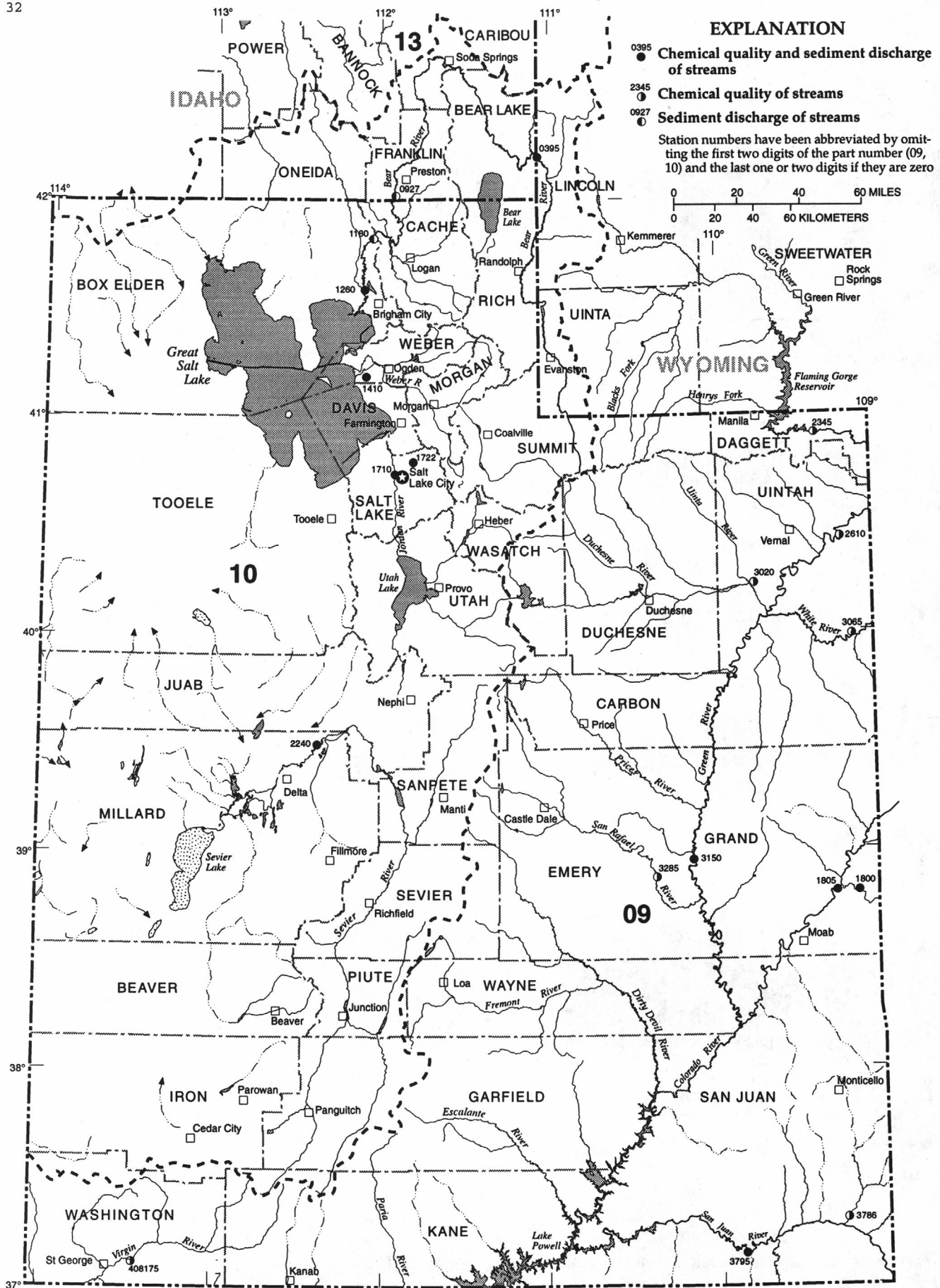


Figure 11. Map showing location of surface-water-quality stations in Utah.



## COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°07'45", long 109°01'36", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.5, T.11 S., R.104 W., Mesa County, Hydrologic Unit 14010005, on right bank 0.7 mi downstream from McDonald Creek, 1.5 mi upstream from Colorado-Utah State line, and 12 mi southwest of Mack.

DRAINAGE AREA.--17,843 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,325 ft above sea level, from topographic map. May 1951, to October 1979, water-stage recorder at site 5.7 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 18 to Jan. 13, May 28 to June 9. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3110	5070	2960	2250	2700	4340	6660	15600	39000	20300	5590	4660
2	3100	4380	2970	2300	2840	4270	6560	14500	38400	18900	5480	4770
3	3050	4570	2990	2300	2860	4260	6780	14100	37000	18200	5320	4810
4	2950	4050	3060	2300	2830	4200	6460	14800	35000	18100	5120	4680
5	2870	3950	3040	2250	2780	4390	6420	16500	31000	17600	4950	4510
6	2820	3600	3010	2200	2690	4350	7100	16900	27000	15500	4930	4460
7	2800	3780	2950	2220	2630	4410	7750	15500	25500	13800	4980	4540
8	2850	3550	2870	2200	2730	4550	7110	15600	26000	12800	5020	4500
9	2980	3560	2780	2200	2740	4600	6570	14400	22500	12900	5220	4560
10	3050	3590	2830	2200	3390	4560	6250	13300	19800	12700	5550	4630
11	3060	3540	2880	2260	3340	4770	6380	13200	18100	12300	6260	4340
12	3090	3460	2980	2250	3060	4680	6480	14800	18500	12100	5940	4300
13	3100	3350	2980	2350	3160	4510	6660	18200	20700	11800	5670	4350
14	3080	3280	2910	2320	3060	4290	6630	22200	23500	11500	5270	4910
15	3090	3370	2800	2620	2950	4300	6180	25500	25400	10800	5240	5360
16	3110	3370	2710	2700	2910	4800	6010	29200	27000	10200	5090	5280
17	3120	3340	2710	2880	3000	5340	6020	35100	27300	9730	4870	5090
18	3120	3380	2450	3100	3000	5670	6140	39400	27800	9270	4480	5040
19	3110	3310	2350	3170	2990	6130	6110	37100	25700	9040	4150	4960
20	3100	3250	2270	2990	3910	6080	6940	34800	24200	8440	4100	4870
21	3070	3340	2200	2840	4450	5920	6680	36000	24000	7990	4190	4790
22	3070	3430	2200	2760	3650	5840	6910	38600	24800	7650	4880	4690
23	3150	3420	2200	2770	3140	5520	7700	40100	25400	7260	5650	4600
24	3180	3400	2200	2780	3190	5640	9110	36700	24500	7080	5560	4520
25	3200	3400	2200	2580	3280	6000	9880	35700	23000	7120	4870	4400
26	3350	3200	2250	2460	4060	6370	8850	35400	20700	6840	4610	4340
27	3530	2940	2250	2490	4250	6940	9480	41100	20000	6490	4950	4290
28	3530	2780	2200	2650	4240	7740	12000	44000	20200	6280	5230	4060
29	3840	2810	2200	2710	---	8070	14300	42000	20100	5950	5090	3900
30	3890	2870	2250	2630	---	7320	15500	39000	19600	5720	4980	3910
31	5540	---	2250	2650	---	7030	---	38400	---	5620	4780	---
TOTAL	99910	105340	80900	78580	90030	166890	232120	847700	761700	339980	158020	138120
MEAN	3223	3511	2610	2535	3215	5384	7737	27350	25390	10970	5097	4604
MAX	5540	5070	3060	3170	4450	8070	15500	44000	39000	20300	6260	5360
MIN	2800	2780	2200	2200	2630	4200	6010	13200	18100	5620	4100	3900
AC-FT	198200	208900	160500	155900	178600	331000	460400	1681000	1511000	674400	313400	274000

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1993, BY WATER YEAR (WY)

	MEAN	3849	3937	3544	3335	3438	3822	5881	14230	17380	7618	3778	3544
MAX	7672	6925	5993	6129	5996	7486	15600	37960	43830	29590	10190	6767	
(WY)	1987	1987	1986	1985	1985	1986	1985	1984	1957	1957	1983	1984	
MIN	1916	2363	2048	1871	1815	1984	1631	2283	2688	1662	1350	1361	
(WY)	1957	1978	1964	1964	1964	1964	1977	1977	1977	1977	1977	1956	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1951 - 1993

ANNUAL TOTAL	1598860	3099290											
ANNUAL MEAN	4368	8491											
HIGHEST ANNUAL MEAN										6200			
LOWEST ANNUAL MEAN										13470			1984
HIGHEST DAILY MEAN	15800	May 28	44000	May 28	68300	May 27	1984			2559			1977
LOWEST DAILY MEAN	a2200	Dec 21	b2200	Dec 21	960	Sep 7	1956			1110			1956
ANNUAL SEVEN-DAY MINIMUM	2210	Dec 21	2210	Dec 21	69800	May 27	1984			c16.12			1984
INSTANTANEOUS PEAK FLOW			44300	May 28									
INSTANTANEOUS PEAK STAGE			c13.13	May 28									
ANNUAL RUNOFF (AC-FT)	3171000	6147000	4491000										
10 PERCENT EXCEEDS	7830	23200	13900										
50 PERCENT EXCEEDS	3410	4610	3890										
90 PERCENT EXCEEDS	2810	2670	2220										

a-also occurred Dec 22-25, 28, 29.

b-Also occurred Dec 22-25, 28, 29, Jan 6, 8-10.

c-From high-water mark

## DOLORES RIVER BASIN

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## 09180000 DOLORES RIVER NEAR CISCO, UT

LOCATION.--Lat 38°47'50", long 109°11'40", in SW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub> sec. 18, T. 23 S., R. 25 E., Grand County, Hydrologic Unit 14030004, on left bank 0.2 mi downstream from Line Canyon, 9.1 mi upstream from mouth, 13.5 mi downstream from Colorado-Utah State line, and 13.9 mi southeast of Cisco.

DRAINAGE AREA.--4,580 mi<sup>2</sup>, approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

REVISED RECORDS.--WDR UT-75-1: 1974.

GAGE.--Water-stage recorder. Elevation of gage is 4,165 ft above sea level, from river-profile map. Dec. 6, 1950 to Apr. 18, 1967, at site 200 ft downstream at different datum; Apr. 19, 1967 to Sept. 3, 1975 at site 10 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Macphee Reservoir, capacity, 381,000 acre-ft, since 1986. Many diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft<sup>3</sup>/s Apr. 21, 1958, gage height, 9.84 ft at different datum; minimum, 3.4 ft<sup>3</sup>/s Sept. 23, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 27	2110	3,450	9.93	June 24	0400	4,500	10.38
Apr. 28	1618	12,200	12.68	Aug. 8	2052	4,810	10.50
May 17	2325	*13,600	*12.99				

Minimum daily discharge, 85 ft<sup>3</sup>/s Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	325	157	e160	225	267	1620	9410	7840	2160	311	375
2	109	295	155	e180	225	267	1660	8430	7400	2000	296	546
3	107	267	170	e160	245	263	1800	8000	6900	1950	294	392
4	110	257	179	e145	225	258	1750	8070	6260	1750	291	328
5	104	207	172	e140	e210	278	2020	7830	5370	1390	291	290
6	95	189	e180	e150	e190	295	2610	6970	4430	1140	277	278
7	85	178	e188	e165	193	295	2710	6160	3710	1010	288	265
8	131	177	152	e180	216	290	2170	6080	3430	1070	640	254
9	157	179	162	e190	304	284	1920	5550	3220	1350	385	241
10	162	185	e163	e195	314	283	2100	5010	2970	1380	518	221
11	158	193	168	e170	290	289	3070	5000	2380	1060	374	209
12	161	191	166	e160	285	297	3620	5390	2210	927	367	197
13	165	190	180	e175	270	297	4260	6020	2320	906	340	201
14	164	179	e161	e210	246	295	4170	7190	2660	852	294	193
15	162	185	e140	e240	233	293	4130	7810	2960	807	349	208
16	158	174	e120	e265	230	310	4440	9050	e3400	736	290	206
17	153	159	e110	e290	249	324	4740	11400	e3700	696	281	190
18	153	145	e115	e315	246	410	6090	12900	e3900	631	261	176
19	156	142	e105	e325	274	486	6890	12000	e3700	602	236	177
20	156	148	e100	e315	360	843	6560	12300	e3500	530	227	172
21	157	145	e101	e300	588	1000	6120	12300	e3400	481	232	170
22	152	154	e120	237	482	1110	6890	12100	e3500	453	387	162
23	150	189	e130	222	356	1290	8510	11800	e3700	433	353	150
24	158	175	e110	217	304	1450	9900	11500	3730	417	284	141
25	162	179	e110	194	292	1800	9320	10900	3170	415	237	120
26	173	e170	e100	175	285	2300	8830	9700	2800	390	230	109
27	180	e160	e140	180	281	2940	9950	9290	2750	360	273	100
28	241	144	e160	e180	274	2840	11300	9040	2510	341	300	110
29	203	144	e170	e185	---	2020	10700	8700	2420	319	299	122
30	190	e150	e180	187	---	1760	10300	8920	2230	304	383	123
31	325	---	e160	196	---	1730	---	8060	---	305	361	---
TOTAL	4850	5575	4524	6403	7929	26860	160150	272880	112470	27175	9949	6426
MEAN	156	186	146	207	283	866	5338	8803	3749	877	321	214
MAX	325	325	188	325	588	2940	11300	12900	7840	2160	640	546
MIN	85	142	100	140	190	258	1620	5000	2210	304	227	100
AC-FT	9620	11060	8970	12700	15730	53280	317700	541300	223100	53900	19730	12750

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1993, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	262	319	245	194	285	503	2170	2923	1539	481	279	204		
MAX	617	894	606	370	518	896	5338	8803	3749	877	665	325		
(WY)	1987	1987	1987	1987	1987	1987	1993	1993	1993	1993	1987	1988		
MIN	133	145	115	109	190	142	177	397	411	213	91.0	80.6		
(WY)	1990	1991	1990	1990	1990	1990	1990	1990	1989	1989	1990	1989		

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1987 - 1993

	1992	1993	1987-1993
ANNUAL TOTAL	261538	645191	
ANNUAL MEAN	715	1768	
HIGHEST ANNUAL MEAN			1993
LOWEST ANNUAL MEAN			1990
HIGHEST DAILY MEAN	6200	12900	1993
LOWEST DAILY MEAN	85	85	1990
ANNUAL SEVEN-DAY MINIMUM	97	103	1990
ANNUAL RUNOFF (AC-FT)	518800	1280000	
10 PERCENT EXCEEDS	2430	6890	
50 PERCENT EXCEEDS	206	290	
90 PERCENT EXCEEDS	110	149	

e Estimated



## DOLORES RIVER BASIN

09180000 DOLORES RIVER NEAR CISCO, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1951 to September 1959, October 1964 to September 1981, March 1982 to current year.

WATER TEMPERATURES: March 1951 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: March 1951 to December 1953, October 1957 to September 1964.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 21,600 microsiemens July 9, 1977; minimum, 240 microsiemens June 22, 1983.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 14, 1958, July 18, 1977; minimum, 0.0°C on many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 5,610 microsiemens Dec. 27; minimum observed, 300 microsiemens Apr. 30.

WATER TEMPERATURES: Maximum observed, 27.5°C Aug. 1; minimum observed, 0.0°C many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCHI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)
OCT, 1992												
13...	1230	163	1790	8.4	14.5	13.0	--	10.1	650	--	--	390
NOV												
25...	1030	197	2900	8.2	-2.0	0.0	--	12.4	655	<1	<1	--
JAN, 1993												
21...	1045	309	2980	8.3	1.0	1.5	--	12.4	660	--	--	380
FEB												
23...	1045	398	1410	8.2	8.0	4.0	--	11.0	650	--	--	370
MAR												
23...	1015	1330	760	8.2	14.0	9.0	1100	10.2	660	<1	<1	200
JUL												
08...	1050	994	800	8.2	31.0	21.0	15	7.4	650	<1	<1	200
26...	1045	368	1450	8.3	34.0	21.0	2.3	7.2	652	30	41	260
AUG												
24...	1000	286	1280	8.3	29.0	21.0	380	7.2	655	<1	<1	330

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT, 1992												
13...	100	35	210	53	5	11	--	--	--	280	330	0.40
NOV												
25...	--	--	--	--	--	--	0	205	168	--	--	--
JAN, 1993												
21...	84	41	480	72	11	22	--	--	--	270	750	0.30
FEB												
23...	84	38	160	48	4	8.0	--	--	--	320	210	0.20
MAR												
23...	54	17	65	40	2	5.7	0	131	106	140	81	0.10
JUL												
08...	58	14	84	47	3	5.5	0	95	78	110	120	0.20
26...	73	19	180	59	5	8.7	0	133	109	160	270	0.30
AUG												
24...	88	27	120	43	3	8.1	0	161	132	220	180	0.50

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT, 1992												
13...	6.4	1080	1060	1.47	475	0.081	--	--	<0.010	--	0.081	--
NOV												
25...	--	--	--	--	--	0.067	0.052	0.010	0.020	0.077	0.072	0.270
JAN, 1993												
21...	8.0	1750	1750	2.38	1460	0.240	0.240	--	0.030	--	0.270	--
FEB												
23...	6.5	944	916	1.28	1010	--	--	--	--	--	--	--
MAR												
23...	7.0	440	435	0.60	1580	0.097	--	--	<0.010	--	0.097	--
JUL												
08...	6.8	464	446	0.63	1250	0.063	--	--	<0.010	--	0.063	--
26...	5.2	814	783	1.11	809	0.075	--	--	<0.010	--	0.075	--
AUG												
24...	8.0	757	733	1.03	585	0.190	0.190	--	0.010	--	0.200	--

## DOLORES RIVER BASIN

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09180000 DOLORES RIVER NEAR CISCO, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT , 1992											
13...	0.070	0.09	--	--	--	--	--	--	--	<0.010	--
NOV											
25...	0.260	0.33	0.13	0.40	0.48	2.1	0.030	<0.010	0.010	<0.010	--
JAN , 1993											
21...	0.260	0.33	--	--	--	--	--	--	--	<0.010	--
FEB											
23...	--	--	--	--	--	--	--	--	--	--	--
MAR											
23...	0.070	0.09	0.83	0.90	1.0	--	0.370	<0.010	--	0.010	0.03
JUL											
08...	0.020	0.03	0.28	0.30	0.36	--	0.040	<0.010	--	<0.010	--
26...	0.040	0.05	0.16	0.20	0.28	--	<0.010	<0.010	--	0.010	0.03
AUG											
24...	0.070	0.09	0.23	0.30	0.50	--	0.020	0.020	--	<0.010	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JUL , 1993							
08...	1050	20	90	<3	12	18	5
26...	1045	<10	95	<3	4	23	10
AUG							
24...	1000	<10	180	<3	<3	36	2

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
JUL , 1993						
08...	<10	1	<1	<1.0	640	<6
26...	<10	1	<1	<1.0	900	<6
AUG						
24...	<10	<1	<1	<1.0	1300	<6

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1992		
13...	1230	90
JAN , 1993		
21...	1045	100
FEB		
23...	1045	80

## DOLORES RIVER BASIN

09180000 DOLORES RIVER NEAR CISCO, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2220	2060	2870	3290	3550	3210	530	330	330	420	1710	1100
2	2360	1470	3570	2630	4480	3600	560	330	335	440	1750	1100
3	2300	1610	4820	1940	3550	3660	540	340	400	445	1600	1060
4	2340	1420	3970	1450	3700	3610	540	340	340	445	1610	1090
5	2350	1450	4660	2020	3030	3670	---	325	365	580	1590	1100
6	2330	1480	2540	2620	3240	3550	510	340	400	680	1640	1210
7	2410	1630	2590	2850	3450	2440	520	350	425	740	1680	1890
8	2450	1850	4130	2900	3700	2320	520	340	440	830	---	1910
9	2550	2110	2520	4570	3890	2420	530	360	460	630	1430	1650
10	3040	2250	3820	2230	2750	---	510	375	470	540	1380	1750
11	2220	2260	2810	---	2610	2830	---	350	510	490	1420	---
12	1810	2460	2480	1740	2830	2860	450	330	540	680	1310	1900
13	1820	2310	3110	2560	2540	2750	---	345	530	760	1400	1810
14	1810	2250	2780	3000	2600	2620	430	305	460	780	---	1950
15	1770	2180	3170	3050	2640	2440	400	310	425	830	---	2020
16	1780	2040	4230	4350	2910	2770	390	345	380	840	1520	1910
17	1800	2150	3330	4190	3240	2900	380	310	330	860	1560	1930
18	1870	1970	3300	3800	3790	2330	380	345	320	950	1530	1930
19	1880	2040	---	3150	3140	2260	360	360	330	1000	1580	1900
20	---	2120	4450	2850	2970	2170	370	320	355	1040	---	2100
21	---	2470	3650	3080	2800	1280	350	325	350	1350	---	2120
22	---	2800	---	3200	1880	---	340	310	340	1350	1710	2140
23	1860	2800	4500	2800	1540	870	330	305	345	1410	1400	2140
24	1860	2840	4480	3650	1390	740	320	305	340	1410	1450	2130
25	1900	2820	4310	4030	1870	670	320	310	345	1420	1200	2300
26	1880	2250	4850	4250	2680	600	320	310	380	---	1500	2300
27	1900	2640	5610	3350	3430	580	310	335	380	1480	---	2550
28	1820	2500	4660	4120	3300	550	310	330	405	1530	1730	2570
29	1470	2600	4000	3880	---	570	320	330	410	1550	1640	2550
30	1810	2700	3940	4450	---	570	300	330	420	1640	1500	2570
31	1110	---	4680	4580	---	540	---	335	---	1690	1110	---
MEAN	2030	2180	3790	3220	2980	2120	413	331	395	960	1520	1890

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	9.0	.0	.0	3.5	4.5	10.5	11.0	14.5	21.5	27.5	23.0
2	18.5	9.0	.5	.0	3.0	8.0	9.5	11.0	14.0	21.5	26.5	23.0
3	18.5	6.5	1.0	.0	5.5	8.5	10.5	11.5	14.5	21.0	25.0	20.0
4	17.0	5.0	1.5	.0	5.0	8.0	12.0	10.0	14.0	17.5	24.0	20.5
5	14.0	6.5	.0	.0	4.0	5.0	---	11.0	13.5	19.0	25.0	19.5
6	17.5	5.0	.5	.0	4.5	9.0	10.0	10.5	14.5	20.0	26.0	19.0
7	14.5	7.0	.5	.0	3.5	10.0	9.5	12.0	14.0	22.5	25.0	20.5
8	13.0	7.0	1.0	.0	3.0	7.5	10.5	11.0	14.0	21.0	---	21.5
9	13.0	7.0	1.0	.0	6.0	10.5	11.0	11.0	15.0	22.0	25.0	23.0
10	11.5	6.5	1.5	.0	6.0	---	11.5	13.0	15.0	24.0	25.5	22.5
11	12.0	4.5	1.5	---	7.0	10.0	---	14.0	18.0	24.0	24.5	22.5
12	12.0	4.0	2.5	.0	7.0	7.5	9.0	15.0	17.5	24.5	24.0	20.0
13	12.0	4.0	.0	.0	4.5	6.5	---	15.0	20.0	24.0	24.5	18.5
14	13.0	3.5	.0	.0	4.5	6.5	8.5	14.0	20.0	24.5	---	18.5
15	13.5	4.0	.0	.0	4.5	9.0	7.5	14.5	20.0	24.0	---	17.0
16	12.5	7.0	.0	.0	3.0	11.5	10.5	14.0	19.0	24.0	20.0	17.0
17	15.0	5.0	.5	.0	4.0	11.0	11.0	12.5	16.0	24.0	24.0	17.0
18	12.0	6.0	.0	2.0	5.0	9.5	10.0	12.5	15.0	24.0	24.5	16.5
19	12.5	5.5	---	3.0	7.5	10.0	9.0	13.5	16.0	24.0	25.0	14.5
20	---	5.5	.0	3.0	8.0	11.0	9.0	14.0	18.0	24.0	---	15.5
21	---	5.0	.0	4.0	6.5	12.0	9.0	14.0	18.0	23.0	---	17.0
22	---	5.0	---	4.0	4.0	---	11.5	14.0	18.5	22.0	20.0	17.5
23	15.5	3.5	.0	4.5	4.5	9.5	11.0	14.0	18.0	22.5	24.0	16.0
24	14.0	2.0	.5	3.0	5.5	9.0	11.0	14.5	17.5	23.5	24.0	19.0
25	14.0	.0	.0	.0	6.0	12.0	9.5	14.0	18.5	24.0	20.0	19.0
26	13.0	.0	.0	2.0	6.0	10.5	11.0	15.0	20.0	---	24.0	19.5
27	14.0	.5	.0	3.0	6.0	9.0	12.0	14.0	20.0	24.5	---	19.0
28	13.0	1.5	.0	3.5	7.0	8.0	12.0	13.5	20.0	24.5	19.0	19.0
29	12.0	2.0	.0	4.0	---	7.0	11.0	14.0	21.0	25.0	21.0	18.5
30	12.0	.5	.5	4.0	---	7.0	11.0	14.0	21.5	26.5	21.0	18.5
31	10.0	---	.0	5.0	---	10.0	---	14.5	---	27.0	23.0	---
MEAN	13.7	4.6	.4	1.5	5.2	8.9	10.3	13.1	17.2	23.1	23.7	19.1

## DOLORES RIVER BASIN

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09180000 DOLORES RIVER NEAR CISCO, UT--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JUL , 1993						
08...	1050	994	21.0	73	124	333
26...	1045	368	21.0	--	22	22
AUG						
24...	1000	286	21.0	99	532	411

09180500 COLORADO RIVER NEAR CISCO, UT

LOCATION.--Lat 38°48'38", long 109°17'34", in NW<sup>1</sup>/<sub>4</sub>/NW<sup>1</sup>/<sub>4</sub>, sec. 17, T. 23 S., R. 24 E., Grand County, Hydrologic Unit 14030005, on left bank 1 mi downstream from Dolores River, 11 mi south of Cisco, 36 mi downstream from Colorado-Utah State line, 97 mi upstream from Green River, and 235 mi upstream from San Juan River, at mile 1,022.3 from Arizona-Sonora.

DRAINAGE AREA.--24,100 mi<sup>2</sup>, approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1895 to current year (1895 to 1910, calendar-year estimates only). Monthly discharge only for some periods, published in WSP 1313. Published as Grand River near Moab, October 1913 to November 1914, and as Grand River near Cisco, November 1914 to September 1917.

REVISED RECORDS.--WSP 918: 1913, 1937. WSP 1313: 1918-22.

GAGE.--Water-stage recorder. Elevation of gage is 4,090 ft above sea level, from river-profile map. Prior to Nov. 10, 1914, several staff and chain gages at bridge near Moab, 31 mi downstream at datum, 3,937.73 ft above mean sea level.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions above station for irrigation and power, including several transmountain diversions. Flow regulated by Blue Mesa Reservoir (see station 09124600) since Nov. 27, 1965.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,800 ft<sup>3</sup>/s June 19, 1917, gage height, 19.7 ft; minimum recorded, 558 ft<sup>3</sup>/s July 21, 1934, gage height, 0.44 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on July 4, 1884 reached a discharge of about 125,000 ft<sup>3</sup>/s, from flood record at Fruita, Colorado.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 26,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 29	1747	*49,300	*16.64	June 18	1304	31,800	12.28

Minimum daily discharge, 2,210 ft<sup>3</sup>/s Dec. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3320	5540	2950	e2350	2870	4460	7600	21000	42500	20900	5870	5090
2	3300	4710	2960	e2390	3010	4460	7450	19300	42300	20000	5780	5230
3	3250	4550	2970	e2350	3070	4400	7670	18400	41300	19100	5620	5200
4	3150	4510	3100	e2310	3000	4380	7540	18600	38700	18900	5420	5120
5	3040	4140	3080	e2300	2920	4370	7520	20400	33700	18400	5270	4950
6	2970	3820	3060	e2330	2810	4610	8460	20800	29400	16700	5230	4760
7	2930	3870	2980	e2360	2730	4530	9280	19500	28000	14900	5240	4910
8	2950	3730	2910	e2390	2910	4680	8600	18900	28400	13700	5340	4860
9	3090	3660	2740	e2400	3240	4730	7800	18000	24800	13700	5770	4880
10	3250	3680	2750	e2410	3700	4700	7570	16200	21900	13700	6090	4980
11	3250	3670	2810	e2360	3680	4990	8230	15600	19800	13200	6280	4800
12	3280	3640	2950	e2330	3430	4940	8630	16800	19400	12800	6290	4650
13	3300	3510	2970	e2360	3350	4830	9000	19800	20900	12500	6060	4560
14	3290	3350	2920	e2550	3300	4620	9120	24300	23500	12200	5600	4880
15	3270	3410	2790	e2650	3180	4520	8940	29000	25800	11600	5550	5460
16	3270	3410	2630	e2750	3090	4830	8960	33300	28600	11000	5350	5570
17	3290	3390	2620	e2920	3190	5370	9160	40500	29900	10500	5110	5430
18	3310	3400	2740	e3200	3230	5710	9660	46700	31200	9870	4830	5330
19	3290	3350	e2400	e3300	3360	6180	10500	46700	28600	9580	4570	5360
20	3260	3250	e2260	e3120	3910	6520	10900	43300	26500	9050	4410	5320
21	3240	3360	e2210	e3100	4880	6580	10500	42800	25600	8430	4510	5220
22	3190	3400	e2240	2950	4350	6600	10800	45400	26300	7960	4910	5080
23	3260	3470	e2260	2950	3590	6610	12100	47600	26500	7580	6010	4960
24	3310	3410	e2230	2920	3680	6630	13900	44700	26200	7300	5970	4890
25	3330	3420	e2230	2770	3680	7180	14800	42000	24800	7340	5410	4780
26	3400	3270	e2220	2550	3920	7860	13700	39700	22000	7200	4930	4700
27	3610	3020	e2280	2550	4470	8590	14400	42000	21000	6790	5080	4580
28	3700	2800	e2340	2680	4410	9260	16800	44800	20900	6540	5570	4490
29	3950	2680	e2380	2870	---	9380	19300	47600	20900	6300	5510	4210
30	4000	2820	e2400	2770	---	8400	20800	46100	20400	6020	5470	4160
31	6060	---	e2350	2770	---	8080	---	43200	---	5910	5330	---
TOTAL	105110	108240	81730	82010	96960	183000	319690	993000	819800	359670	168380	148410
MEAN	3391	3608	2636	2645	3463	5903	10660	32030	27330	11600	5432	4947
MAX	6060	5540	3100	3300	4880	9380	20800	47600	42500	20900	6290	5570
MIN	2930	2680	2210	2300	2730	4370	7450	15600	19400	5910	4410	4160
AC-FT	208500	214700	162100	162700	192300	363000	634100	1970000	1626000	713400	334000	294400

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1993, BY WATER YEAR (WY)

MEAN	3924	3759	3254	3054	3249	3766	8446	19690	22530	9017	4261	3626
MAX	9416	7601	6588	6371	6326	8412	22590	42090	55530	31750	11400	11330
(WY)	1942	1987	1987	1985	1985	1985	1942	1984	1917	1957	1984	1929
MIN	1353	1730	2044	1900	2015	2009	1638	2322	2820	1057	1017	1078
(WY)	1935	1935	1940	1937	1935	1977	1977	1977	1977	1934	1934	1934

## SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

## WATER YEARS 1914 - 1993

ANNUAL TOTAL	1728040		3466000				
ANNUAL MEAN	4721		9496			7386	
HIGHEST ANNUAL MEAN						14930	1984
LOWEST ANNUAL MEAN						2631	1977
HIGHEST DAILY MEAN	17100	May 29	47600	May 23		73200	Jun 19 1917
LOWEST DAILY MEAN	2210	Dec 21	2210	Dec 21		640	Jul 21 1934
ANNUAL SEVEN-DAY MINIMUM	2240	Dec 20	2240	Dec 20		736	Jul 15 1934
ANNUAL RUNOFF (AC-FT)	3428000		6875000			5351000	
10 PERCENT EXCEEDS	8940		24800			18900	
50 PERCENT EXCEEDS	3470		4910			3800	
90 PERCENT EXCEEDS	2910		2740			2220	

e Estimated



COLORADO RIVER MAIN STEM

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued  
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1928 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1952, October 1954 to September 1981, March 1982 to current year.

WATER TEMPERATURES: May 1949 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: May 1930 to September 1984.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,820 microsiemens Dec. 13, 1957; minimum daily, 291 microsiemens May 31, 1953.

WATER TEMPERATURES: Maximum, 29.0°C July 29, 1966; minimum, 0.0°C on many days during winter period most years.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 69,000 mg/L Oct. 27, 1951; minimum daily mean, 4 mg/L Aug. 22, 1960.

SEDIMENT LOADS: Maximum daily, 2,790,000 tons Oct. 14, 1941; minimum daily, 14 tons Aug. 22, 1960.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,670 microsiemens Jan. 29; minimum observed, 335 microsiemens June 7.

WATER TEMPERATURES: Maximum daily, 27.0°C several days in August; minimum observed, 0.0°C many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)
OCT, 1992												
08...	1200	2890	1370	8.4	11.0	12.0	--	9.0	657	--	--	490
NOV												
20...	1030	3370	1420	8.3	4.0	6.0	14	11.0	649	<1	<1	430
JAN, 1993												
21...	1230	3100	1520	8.3	4.5	2.5	--	12.1	660	--	--	390
FEB												
22...	1200	4630	1400	8.1	9.0	5.0	--	11.0	660	--	--	300
MAR												
22...	1030	6780	850	8.2	12.0	10.0	650	10.1	660	<1	<1	260
APR												
28...	1000	17200	490	8.3	17.0	12.0	300	9.0	659	<1	<1	170
MAY												
18...	1025	45700	370	8.0	20.0	12.0	1700	9.0	660	<1	<1	140
JUN												
22...	0950	27400	365	8.1	25.0	16.0	51	8.1	656	<1	<1	140
JUL												
20...	1200	9040	690	8.2	32.0	20.0	--	7.5	660	--	--	220
AUG												
23...	1215	5750	1100	8.3	33.0	21.0	--	7.3	660	--	--	400

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT, 1992												
08...	130	40	120	35	2	4.9	--	--	--	410	110	0.50
NOV												
20...	110	37	120	38	3	5.0	0	215	176	390	120	0.40
JAN, 1993												
21...	96	37	150	45	3	6.9	--	--	--	310	160	0.40
FEB												
22...	75	27	150	52	4	5.9	--	--	--	270	160	0.20
MAR												
22...	67	22	73	38	2	3.9	0	163	133	190	66	0.20
APR												
28...	45	14	33	29	1	2.6	0	136	112	110	24	0.20
MAY												
18...	36	11	21	25	0.8	2.6	0	109	89	78	10	0.20
JUN												
22...	39	9.8	19	23	0.7	1.7	0	107	88	71	15	0.20
JUL												
20...	63	16	49	32	1	2.4	--	--	--	160	48	0.20
AUG												
23...	110	31	92	33	2	4.4	--	--	--	320	100	0.40

## COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT, 1992											
08...	8.2	936	923	1.27	7300	0.640	--	--	<0.010	--	0.640
NOV											
20...	9.7	931	903	1.27	8470	0.730	0.770	0.020	0.020	0.750	0.790
JAN, 1993											
21...	11	942	876	1.28	7880	0.850	0.850	--	0.030	--	0.880
FEB											
22...	8.8	792	793	1.08	9900	0.550	0.550	--	0.030	--	0.580
MAR											
22...	11	530	516	0.72	9700	0.370	0.370	--	0.010	--	0.380
APR											
28...	9.2	315	307	0.43	14600	0.260	--	--	<0.010	--	0.260
MAY											
18...	9.6	232	224	0.32	28600	0.310	--	--	<0.010	--	0.310
JUN											
22...	10	247	220	0.34	18300	0.210	--	--	<0.010	--	0.210
JUL											
20...	8.3	420	415	0.57	10300	0.370	--	--	<0.010	--	0.370
AUG											
23...	11	778	767	1.06	12100	0.840	--	--	<0.010	--	0.840

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT, 1992											
08...	--	0.020	0.03	--	--	--	--	--	--	<0.010	--
NOV											
20...	0.030	<0.010	--	--	<0.20	--	0.030	<0.010	<0.010	<0.010	--
JAN, 1993											
21...	--	0.190	0.24	--	--	--	--	--	--	0.010	0.03
FEB											
22...	--	0.110	0.14	--	--	--	--	--	--	<0.010	--
MAR											
22...	--	0.070	0.09	0.73	0.80	1.2	0.290	<0.010	--	0.010	0.03
APR											
28...	--	0.050	0.06	0.25	0.30	0.56	0.040	0.040	--	0.020	0.06
MAY											
18...	--	0.110	0.14	1.9	2.0	2.3	0.820	0.020	--	0.010	0.03
JUN											
22...	--	0.030	0.04	0.17	0.20	0.41	<0.010	0.020	--	0.020	0.06
JUL											
20...	--	0.030	0.04	--	--	--	--	--	--	0.020	0.06
AUG											
23...	--	0.030	0.04	--	--	--	--	--	--	<0.010	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV, 1992							
20...	1030	20	51	<3	4	48	9
MAR, 1993							
22...	1030	<10	92	<3	5	24	4
APR							
28...	1000	50	81	<3	24	15	6
JUN							
22...	0950	20	43	<3	21	10	3

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV, 1992						
20...	10	1	<1	<1.0	1300	<6
MAR, 1993						
22...	20	<1	3	<1.0	690	<6
APR						
28...	<10	1	2	<1.0	440	<6
JUN						
22...	<10	<1	1	<1.0	310	<6

COLORADO RIVER MAIN STEM

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09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
OCT , 1992		
08...	1200	110
JAN , 1993		
21...	1230	90
FEB		
22...	1200	80
JUL		
20...	1200	60
AUG		
23...	1215	80

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1300	1290	1550	---	1440	1070	870	470	385	395	910	1100
2	1310	1230	1510	1400	---	1040	880	480	390	415	910	1110
3	1310	1270	1450	1210	---	---	880	480	420	410	900	1130
4	1300	1240	1430	1280	1440	1040	860	480	365	410	930	1120
5	1330	1260	1430	1290	1450	1070	860	475	340	430	950	1130
6	1350	1300	1600	---	1410	1050	900	485	350	465	960	1120
7	1370	1320	1440	---	1420	1010	870	490	335	500	1000	1120
8	1380	1350	1370	---	1420	990	860	530	380	540	1010	1140
9	1380	1380	---	---	1430	1020	850	540	415	530	1040	1130
10	1400	1380	1390	1370	1340	1000	860	500	450	520	---	1140
11	1370	1310	1390	1190	1420	990	860	560	480	530	1100	1110
12	1330	1370	1480	1180	---	1000	840	550	480	540	1030	1120
13	1310	1380	1630	1250	1370	990	820	570	450	550	1070	1150
14	1320	1400	1470	1280	1400	980	820	450	405	540	1030	1140
15	1320	1360	1450	1350	1280	960	830	430	380	550	1030	1140
16	1320	1360	1510	1380	1300	970	810	400	360	570	1070	1170
17	1310	1400	1400	1340	1340	1000	820	415	345	600	1080	1090
18	1350	1350	1380	1340	1370	900	780	470	340	620	1100	1080
19	1320	1320	1440	1120	1370	880	800	400	360	650	1110	1090
20	1330	1350	1570	---	1380	860	760	395	375	670	1120	1100
21	1320	1330	1500	1470	1380	840	740	370	385	690	1130	1080
22	1340	1380	1580	1480	1140	820	730	375	375	730	1150	1100
23	1320	1390	1660	1460	1220	820	700	390	370	750	1130	1090
24	1310	1390	1530	1490	1200	840	650	365	375	780	1100	1100
25	1320	1370	---	1470	1190	870	600	345	365	810	1090	1090
26	1310	1310	1530	1480	1280	830	610	355	400	830	1080	1090
27	1310	1310	1480	---	1230	---	610	340	415	840	1080	1100
28	1320	1330	1590	1530	1020	810	560	355	410	870	1120	1110
29	1300	1390	1300	1670	---	800	510	360	405	870	1160	---
30	1320	1430	---	1660	---	860	490	345	410	880	1120	1230
31	1260	---	---	1510	---	---	---	360	---	900	1110	---
MEAN	1330	1340	1480	1380	1330	940	768	436	390	625	1050	1120

## COLORADO RIVER MAIN STEM

09180500 COLORADO RIVER NEAR CISCO, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	8.0	3.0	---	3.0	8.0	12.0	12.0	14.0	18.0	27.0	---
2	16.0	8.0	3.0	.0	---	8.0	12.0	12.0	14.0	18.0	27.0	---
3	16.0	8.0	3.0	.0	---	---	12.0	12.0	14.0	18.0	27.0	---
4	16.0	8.0	3.0	.0	4.0	10.0	12.0	14.0	14.0	18.0	27.0	---
5	16.0	8.0	3.0	.0	4.0	10.0	12.0	14.0	15.0	18.0	27.0	23.0
6	15.0	8.0	3.0	---	4.0	10.0	12.0	14.0	16.0	18.0	27.0	23.0
7	15.0	8.0	3.0	---	4.0	10.0	12.0	14.0	16.0	18.0	27.0	23.0
8	15.0	7.0	3.0	---	4.0	10.0	12.0	14.0	16.0	18.0	27.0	22.0
9	15.0	7.0	---	---	4.0	10.0	12.0	14.0	16.0	18.0	27.0	22.0
10	14.0	7.0	3.0	.0	4.0	10.0	12.0	14.0	16.0	20.0	---	22.0
11	14.0	7.0	2.0	.0	6.0	10.0	12.0	14.0	16.0	20.0	27.0	22.0
12	14.0	6.0	2.0	.0	---	10.0	12.0	14.0	16.0	20.0	27.0	22.0
13	14.0	6.0	2.0	.0	6.0	10.0	12.0	14.0	16.0	20.0	26.0	20.0
14	14.0	6.0	2.0	.0	6.0	11.0	12.0	14.0	16.0	20.0	26.0	20.0
15	14.0	6.0	2.0	.0	6.0	11.0	12.0	14.0	16.0	20.0	26.0	20.0
16	14.0	6.0	2.0	.0	6.0	11.0	12.0	14.0	16.0	22.0	26.0	20.0
17	14.0	6.0	2.0	.0	6.0	11.0	12.0	14.0	16.0	22.0	26.0	20.0
18	14.0	6.0	2.0	.0	6.0	11.0	12.0	14.0	17.0	22.0	26.0	20.0
19	14.0	6.0	.0	.0	7.0	11.0	12.0	14.0	17.0	22.0	26.0	20.0
20	12.0	6.0	.0	---	7.0	12.0	12.0	14.0	17.0	22.0	25.0	20.0
21	12.0	5.0	.0	.0	7.0	12.0	12.0	14.0	17.0	22.0	25.0	20.0
22	12.0	5.0	.0	.0	7.0	12.0	12.0	14.0	18.0	22.0	24.0	18.0
23	12.0	4.0	.0	.0	7.0	12.0	12.0	14.0	18.0	23.0	24.0	18.0
24	12.0	4.0	.0	.0	7.0	12.0	12.0	14.0	18.0	23.0	24.0	18.0
25	10.0	4.0	---	.0	8.0	12.0	12.0	14.0	18.0	24.0	24.0	18.0
26	10.0	4.0	.0	2.0	8.0	12.0	12.0	14.0	18.0	24.0	24.0	18.0
27	10.0	4.0	.0	---	8.0	---	12.0	14.0	18.0	24.0	24.0	18.0
28	10.0	4.0	.0	2.0	8.0	12.0	12.0	14.0	18.0	24.0	23.0	18.0
29	8.0	3.0	.0	2.0	---	12.0	12.0	14.0	18.0	24.0	23.0	---
30	8.0	3.0	---	2.0	---	12.0	12.0	14.0	18.0	25.0	23.0	18.0
31	7.0	---	---	2.0	---	---	---	14.0	---	25.0	23.0	---
MEAN	13.0	5.9	1.6	.4	5.9	10.8	12.0	13.8	16.4	21.0	25.5	20.1

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
JUN, 1993 22...	0950	27400	16.0	38	562	41600

TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

45

09182200 CASTLE CREEK BELOW CASTLETON NEAR MOAB, UT

LOCATION.--Lat 38°36'45", long 109°19'54", in SE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 24, T. 25 S., R. 23 E., Grand County, Hydrologic Unit 14030005, on left bank and 25.5 mi northwest of Moab.

DRAINAGE AREA.--17.6 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,600 ft above sea level from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small diversions for irrigation above and below the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57 ft<sup>3</sup>/s May 27, 1993, gage height, 5.30 ft, from floodmarks; minimum daily discharge, 1.6 ft<sup>3</sup>/s Sept. 27-30, Oct. 1-6, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 57 ft<sup>3</sup>/s May 27, gage height, 5.30 ft, from floodmarks; minimum daily discharge, 1.6 ft<sup>3</sup>/s, Oct. 1-6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.8	1.8	1.8	2.1	2.5	2.2	2.6	24	7.3	4.2	3.4
2	1.6	2.1	1.8	1.8	2.1	2.5	2.2	2.7	24	7.5	3.9	3.4
3	1.6	1.8	1.8	e1.8	2.1	2.5	2.2	2.7	24	7.9	3.9	2.9
4	1.6	1.8	1.8	e1.7	2.0	2.4	2.2	3.0	22	e8.5	3.9	2.6
5	1.6	1.8	1.8	e1.7	2.1	2.4	2.2	3.3	20	e9.0	3.9	2.7
6	1.6	1.8	1.8	1.8	2.1	2.5	2.5	3.2	18	e9.4	3.5	2.6
7	1.7	1.8	1.8	1.9	2.1	2.5	2.3	e2.9	16	e9.6	3.4	2.6
8	1.8	1.8	1.8	1.9	2.2	2.5	2.2	e3.6	13	9.1	3.5	2.6
9	1.8	1.8	1.8	1.9	2.3	2.5	2.2	e3.5	12	8.6	3.5	2.6
10	1.8	1.9	1.8	1.9	2.2	2.5	2.2	e3.4	11	8.3	5.9	2.6
11	1.8	1.8	1.8	1.9	2.2	2.6	2.2	e3.3	9.2	8.0	4.6	2.5
12	1.8	1.8	1.8	e1.9	2.2	2.4	2.2	e3.2	8.7	7.9	4.5	2.5
13	1.8	1.8	1.8	1.9	2.2	2.4	2.2	e3.4	9.8	7.7	4.4	2.6
14	1.8	1.8	e1.7	1.9	2.0	2.4	2.0	e5.0	11	7.2	4.6	2.6
15	1.8	1.8	1.8	1.9	2.1	2.3	1.9	e7.0	12	7.0	4.5	2.6
16	1.8	1.8	1.9	1.9	2.2	2.2	1.9	e8.0	13	6.6	4.1	2.6
17	1.8	1.9	e1.8	2.0	2.2	2.2	1.9	e2.0	15	6.5	3.8	2.5
18	1.8	1.8	1.9	2.0	2.2	2.5	2.0	e1.9	14	6.3	3.7	2.6
19	1.7	1.9	e1.9	2.3	2.6	2.3	2.0	e1.7	12	5.9	3.8	2.6
20	1.8	2.0	e1.8	2.1	3.1	2.3	2.0	e1.6	11	5.8	3.7	2.5
21	1.8	1.9	e1.8	2.1	2.6	2.3	2.0	1.7	9.6	5.6	3.7	2.4
22	1.8	1.9	e1.9	2.1	2.6	2.3	2.4	1.7	9.6	5.4	3.7	2.4
23	1.8	1.9	e2.0	2.0	2.5	2.2	2.8	1.7	9.4	5.3	3.6	2.4
24	1.8	1.9	e2.0	1.9	2.7	2.2	2.6	1.7	8.7	5.4	3.5	2.4
25	1.9	e1.7	e2.0	e1.8	2.6	2.2	2.1	e1.7	8.4	5.2	3.6	2.4
26	1.9	e1.7	e2.0	2.0	2.6	2.2	2.1	e1.7	8.0	5.0	3.7	2.4
27	1.9	e1.8	e1.9	2.0	2.5	2.4	e2.2	e2.9	7.5	4.8	3.5	2.4
28	2.0	1.8	1.9	2.0	2.5	2.3	e2.0	2.7	7.5	4.5	3.5	2.4
29	1.9	1.8	1.9	2.0	---	2.2	e2.0	2.6	7.5	4.5	3.5	2.4
30	2.3	1.9	1.9	2.0	---	2.2	2.5	2.5	7.2	4.2	3.5	2.4
31	3.7	---	1.8	2.1	---	2.2	---	2.4	---	4.1	3.5	---
TOTAL	57.4	55.1	57.3	60.0	64.9	73.1	65.4	365.8	383.1	208.1	120.6	77.6
MEAN	1.85	1.84	1.85	1.94	2.32	2.36	2.18	11.8	12.8	6.71	3.89	2.59
MAX	3.7	2.1	2.0	2.3	3.1	2.6	2.8	2.9	24	9.6	5.9	3.4
MIN	1.6	1.7	1.7	1.7	2.0	2.2	1.9	2.6	7.2	4.1	3.4	2.4
AC-FT	114	109	114	119	129	145	130	726	760	413	239	154

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993
MEAN	1.85	1.84	1.85	1.94	2.32	2.36	2.18	7.73	8.26	4.64	3.05	2.20
MAX	1.85	1.84	1.85	1.94	2.32	2.36	2.18	11.8	12.8	6.71	3.89	2.59
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993
MIN	1.85	1.84	1.85	1.94	2.32	2.36	2.18	3.66	3.76	2.56	2.20	1.82
(WY)	1993	1993	1993	1993	1993	1993	1993	1992	1992	1992	1992	1992

SUMMARY STATISTICS

FOR 1993 WATER YEAR

WATER YEARS 1992 - 1993

ANNUAL TOTAL	1588.4		
ANNUAL MEAN	4.35		
HIGHEST ANNUAL MEAN		4.35	1993
LOWEST ANNUAL MEAN		4.35	1993
HIGHEST DAILY MEAN	29	May 27	1993
LOWEST DAILY MEAN	1.6	Oct 1	1992
ANNUAL SEVEN-DAY MINIMUM	1.6	Oct 1	1992
ANNUAL RUNOFF (AC-FT)	3150		
10 PERCENT EXCEEDS	9.5		
50 PERCENT EXCEEDS	2.4		
90 PERCENT EXCEEDS	1.8		

e Estimated



## TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

09182400 CASTLE CREEK BELOW CASTLE VALLEY NEAR MOAB, UT

LOCATION.--Lat 38°40'26", long 109°26'58", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 35, T. 24 S., R. 22 E., Grand County, Hydrologic Unit 14030005, on left bank and 16.5 mi northwest of Moab.

DRAINAGE AREA.--58.1 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,120 ft above sea level from topographic map.

REMARKS.--Records good. Small diversions for irrigation above and below the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 288 ft<sup>3</sup>/s May 27, 1993, gage-height, 7.68 ft, from slope-area measurement; minimum daily discharge, 4.0 ft<sup>3</sup>/s July 5-6, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 288 ft<sup>3</sup>/s May 27, gage height, 7.68 ft, from slope-area measurement; minimum daily discharge, 4.6 ft<sup>3</sup>/s Aug. 23-24, Sept. 7-9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	9.3	8.0	8.1	7.9	8.0	9.0	7.5	25	11	6.0	5.3
2	6.2	9.6	8.1	8.2	7.2	8.1	8.9	7.0	24	10	5.5	5.3
3	6.4	9.6	8.1	7.8	7.0	8.1	8.4	6.4	24	10	5.3	5.3
4	6.8	9.5	8.0	6.4	6.8	8.1	8.4	6.5	22	10	5.5	5.3
5	6.7	9.4	8.3	6.4	6.7	8.0	8.8	8.1	18	9.0	5.2	5.2
6	6.4	9.1	8.4	6.8	6.9	8.1	10	7.5	17	8.2	5.0	4.9
7	6.6	8.7	8.4	7.8	7.3	8.0	8.8	6.8	17	8.1	5.3	4.6
8	6.6	8.6	8.3	8.8	7.7	8.4	8.4	8.5	15	7.9	8.9	4.6
9	7.3	8.5	8.3	8.5	7.7	8.4	8.4	8.0	14	8.0	5.7	4.6
10	7.0	8.7	8.2	12	7.2	8.5	8.6	7.7	14	7.6	8.1	4.8
11	6.2	8.6	8.2	16	7.2	8.9	8.6	7.5	13	7.4	5.5	4.9
12	6.0	8.5	8.1	7.2	7.2	8.5	8.7	7.2	13	6.5	5.6	4.8
13	5.9	8.4	8.0	7.4	7.1	8.6	8.8	7.5	13	5.8	4.9	4.9
14	6.0	8.5	7.3	7.3	7.0	8.5	8.4	9.0	14	6.6	5.5	5.0
15	5.9	8.4	8.0	7.4	7.1	8.2	8.5	9.8	14	6.0	5.6	4.9
16	5.7	8.5	8.1	8.2	7.1	7.9	8.3	14	15	5.1	4.9	5.0
17	5.9	8.4	7.1	10	7.2	7.8	8.2	31	17	5.0	5.0	5.0
18	6.0	8.4	8.1	8.4	7.1	8.6	8.2	29	18	5.6	5.0	5.2
19	6.1	8.5	7.6	18	8.1	8.0	8.3	27	17	6.1	4.7	5.3
20	6.4	8.8	6.5	8.6	7.9	8.2	8.3	26	15	6.2	5.4	5.6
21	6.3	8.5	6.4	8.3	7.3	8.1	8.0	26	14	5.2	5.2	5.3
22	5.8	8.5	6.6	8.2	7.5	8.0	6.5	27	14	5.5	5.1	5.3
23	5.7	8.5	6.7	7.9	7.6	8.3	8.2	25	13	6.7	4.6	5.5
24	6.0	8.2	6.9	7.6	9.5	8.2	9.2	25	12	7.3	4.6	5.2
25	7.5	7.5	7.2	7.0	8.2	8.1	8.4	24	13	6.5	5.2	5.4
26	7.5	7.5	7.2	7.4	8.0	8.2	8.5	25	13	6.1	5.8	5.3
27	7.3	7.6	6.8	7.8	8.0	9.7	8.6	34	12	5.7	5.5	5.3
28	8.0	8.1	7.4	7.7	8.0	8.9	7.9	28	11	5.4	5.6	5.2
29	6.2	8.3	8.3	7.8	---	8.6	7.8	28	10	5.5	5.6	5.4
30	6.3	8.0	9.3	7.6	---	9.1	7.8	25	11	5.6	5.6	5.4
31	13	---	8.3	7.8	---	9.1	---	25	---	6.3	5.5	---
TOTAL	205.9	256.7	240.2	264.4	209.5	259.2	252.9	534.0	462	215.9	170.9	153.8
MEAN	6.64	8.56	7.75	8.53	7.48	8.36	8.43	17.2	15.4	6.96	5.51	5.13
MAX	13	9.6	9.3	18	9.5	9.7	10	34	25	11	8.9	5.6
MIN	5.7	7.5	6.4	6.4	6.7	7.8	6.5	6.4	10	5.0	4.6	4.6
AC-FT	408	509	476	524	416	514	502	1060	916	428	339	305

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993
MEAN	6.64	8.56	7.75	8.53	7.48	8.36	8.43	11.8	10.8	6.08	5.39	5.48
MAX	6.64	8.56	7.75	8.53	7.48	8.36	8.43	17.2	15.4	6.96	5.51	5.84
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1992
MIN	6.64	8.56	7.75	8.53	7.48	8.36	8.43	6.43	6.15	5.20	5.26	5.13
(WY)	1993	1993	1993	1993	1993	1993	1993	1992	1992	1992	1992	1993

## SUMMARY STATISTICS

## FOR 1993 WATER YEAR

## WATER YEARS 1992 - 1993

ANNUAL TOTAL	3225.4		
ANNUAL MEAN	8.84	8.84	1993
HIGHEST ANNUAL MEAN		8.84	1993
LOWEST ANNUAL MEAN		8.84	1993
HIGHEST DAILY MEAN	34	May 27	1993
LOWEST DAILY MEAN	4.6	Aug 23	1992
ANNUAL SEVEN-DAY MINIMUM	4.7	Sep 6	1992
ANNUAL RUNOFF (AC-FT)	6400		
10 PERCENT EXCEEDS	14		
50 PERCENT EXCEEDS	8.0		
90 PERCENT EXCEEDS	5.3		

TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

47

09183500 MILL CREEK AT SHELEY TUNNEL, NEAR MOAB, UT

LOCATION.--Lat 38°28'59", long 109°24'12", in NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 4, T. 27 S., R. 23 E. in San Juan County, Hydrologic Unit 14030005 on the left bank 1,000 ft above Sheley Tunnel, and 9 mi southeast of Moab.

DRAINAGE AREA.--26.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1954 to September 1959, October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,500 ft above sea level, from a topographic map. Prior to Oct. 1, 1987 at different site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small diversion for irrigation above the station. Sheley Tunnel, which diverts water from Mill Creek for K. E. McDougald Reservoir, is located 1,000 ft below the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft<sup>3</sup>/s Aug. 8, 1993, gage height, 7.66 ft from floodmarks, from rating curve extended above 340 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum recorded, 2.1 ft<sup>3</sup>/s Apr. 5, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 27	1617	1,010	7.49	Aug. 8	1854	*1,080	*7.66

Minimum daily, 5.0 ft<sup>3</sup>/s Nov. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.9	6.1	5.7	5.7	5.3	7.8	23	104	47	15	16
2	6.3	6.1	6.3	5.9	5.7	5.5	8.3	23	102	45	15	15
3	6.4	5.7	6.4	5.9	5.6	5.5	7.7	25	93	44	15	15
4	6.4	5.4	6.2	e5.6	5.6	5.4	8.4	27	84	42	14	15
5	6.4	5.8	6.3	e5.8	5.5	5.4	9.1	25	77	39	14	15
6	6.4	6.2	6.2	6.1	5.6	5.5	9.7	23	74	36	13	14
7	6.2	6.2	6.2	5.9	5.8	5.7	8.4	23	66	35	13	14
8	6.2	6.2	6.2	6.9	5.8	5.8	7.9	22	61	34	e55	14
9	6.2	6.2	6.2	7.8	6.6	6.1	8.6	20	58	32	e25	14
10	6.1	6.3	6.3	7.5	5.9	6.1	9.4	20	56	31	e27	14
11	6.0	6.0	6.2	7.5	5.9	6.5	9.7	25	56	30	22	14
12	6.0	6.0	6.3	e7.5	5.8	5.8	10	31	57	29	22	14
13	6.3	6.3	6.2	7.5	5.7	5.7	10	41	62	28	21	14
14	6.2	6.3	e6.0	6.0	5.7	5.8	9.8	51	66	27	23	14
15	6.2	6.2	6.4	6.2	5.9	5.9	9.8	62	72	26	18	14
16	6.2	6.2	e6.3	5.6	6.0	6.0	10	79	74	25	18	13
17	6.2	6.2	6.7	6.0	5.9	6.3	11	114	72	24	17	13
18	6.1	6.2	6.3	6.4	5.8	7.4	13	103	67	22	17	14
19	6.1	6.2	e6.1	8.0	6.4	7.4	12	98	59	21	17	13
20	6.0	6.5	e6.2	6.2	8.2	7.8	13	97	58	20	17	13
21	6.1	6.1	e6.0	6.0	5.8	8.1	14	106	58	19	18	13
22	6.0	6.1	e6.1	6.0	5.6	8.2	16	111	60	19	17	13
23	6.0	6.1	e6.3	5.7	5.6	8.5	19	105	59	19	17	13
24	6.3	5.2	e5.9	5.7	5.9	9.3	19	100	58	19	16	12
25	e6.6	e5.0	e5.9	5.6	5.8	10	17	102	55	18	17	12
26	e6.2	e5.2	e5.6	5.7	5.7	11	21	105	52	17	17	12
27	e6.1	e5.5	e5.6	5.7	5.4	11	23	141	52	17	17	12
28	e6.2	5.8	6.0	5.4	5.4	9.9	25	107	51	16	16	12
29	e7.0	5.9	6.0	5.6	---	8.4	25	102	50	16	16	12
30	e7.5	5.9	5.9	5.6	---	8.2	24	104	49	16	16	12
31	13	---	5.6	5.8	---	7.5	---	105	---	15	16	---
TOTAL	201.1	178.9	190.0	192.8	164.3	221.0	396.6	2120	1962	828	581	405
MEAN	6.49	5.96	6.13	6.22	5.87	7.13	13.2	68.4	65.4	26.7	18.7	13.5
MAX	13	6.5	6.7	8.0	8.2	11	25	141	104	47	55	16
MIN	6.0	5.0	5.6	5.4	5.4	5.3	7.7	20	49	15	13	12
AC-FT	399	355	377	382	326	438	787	4210	3890	1640	1150	803

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955-59, 1988-93, BY WATER YEAR (WY)

	1955	1956	1957	1958	1959	1988	1989	1990	1991	1992	1993
MEAN	8.00	7.17	6.69	6.23	5.93	6.42	11.4	29.3	28.3	13.9	10.1
MAX	12.1	15.6	11.0	8.82	8.06	9.43	22.2	70.5	67.9	33.7	18.7
(WY)	1958	1988	1988	1988	1988	1988	1958	1958	1957	1993	1993
MIN	4.84	3.89	4.30	4.60	4.48	4.88	5.42	8.03	7.08	5.32	4.69
(WY)	1957	1957	1955	1957	1956	1957	1990	1990	1959	1959	1959

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1955-59, 1988-93

ANNUAL TOTAL	4291.4	7440.7	11.9
ANNUAL MEAN	11.7	20.4	20.4
HIGHEST ANNUAL MEAN			6.13
LOWEST ANNUAL MEAN			141
HIGHEST DAILY MEAN	84	May 27	May 27 1990
LOWEST DAILY MEAN	5.0	Nov 25	Nov 2 1956
ANNUAL SEVEN-DAY MINIMUM	5.5	Nov 24	Oct 30 1956
ANNUAL RUNOFF (AC-FT)	8510	14760	8590
10 PERCENT EXCEEDS	24	58	22
50 PERCENT EXCEEDS	7.5	8.6	7.5
90 PERCENT EXCEEDS	5.9	5.7	4.8

e Estimated

## TRIBUTARIES BETWEEN DOLORES RIVER AND GREEN RIVER

09184000 MILL CREEK NEAR MOAB, UT

LOCATION.--Lat 38°33'44", long 109°30'48", in NW1/4, NW1/4, NE1/4, sec. 8, T. 26 S., R. 22 E., Grand County, Hydrologic Unit 14030005, on right bank 0.5 mi downstream from North Fork, 1.5 mi southeast of Moab, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--74.9 mi<sup>2</sup>.

PERIOD OF RECORD.--October, November 1914 (fragmentary), February to November 1915, February 1916 to June 1917, April to July 1918 (fragmentary), April to July 1919, July 1949 to September 1971. October 1972 to September 1993 (discontinued).

GAGE.--Water-stage recorder and sharp-crested weir. Elevation of gage is 4,240 ft above sea level, from topographic map. Prior to Apr. 28, 1918, nonrecording gage and Apr. 28, 1918 to Aug. 2, 1919, July 1949 to Mar. 15, 1962, water-stage recorder, 0.4 mi upstream at various datums.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversion into Sheley Tunnel, for storage in K. E. McDougald Reservoir began in March 1981. Diversion approximately 6.0 mi above station. Records do not include approximately 4,188 acre-ft diverted during the 1992 water year.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded discharge, about 5,110 ft<sup>3</sup>/s Aug. 21, 1953, gage height, 10.74 ft from floodmark, site and datum then in use from rating curve extended above 700 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 8.24 ft, 8.62 ft, 9.81 ft, and 11.1 ft; maximum gage height, 11.6 ft Aug. 26, 1961, site and datum then in use; minimum recorded, 0.2 ft<sup>3</sup>/s Feb. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 17	0845	387	3.50	Aug. 8	2049	*1,470	*5.92
May 27	1814	1,220	5.45				

Minimum daily, 3.8 ft<sup>3</sup>/s Apr. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	12	5.4	4.9	11	7.2	5.8	15	e70	30	13	e11
2	6.6	10	5.4	5.3	10	7.0	5.3	13	68	27	13	e10
3	5.9	7.6	5.3	4.9	9.0	7.0	4.8	14	65	26	13	9.9
4	6.1	7.3	5.0	4.6	8.9	6.8	4.4	28	56	26	13	9.7
5	6.2	7.1	5.3	4.8	8.3	6.7	4.7	16	47	20	14	9.8
6	6.2	7.0	5.4	4.8	8.9	6.6	7.3	14	43	16	13	9.9
7	6.1	7.0	5.3	5.3	9.0	6.6	7.9	17	39	17	13	9.8
8	6.3	7.0	5.0	6.4	9.8	6.6	6.4	19	36	18	45	9.7
9	6.3	6.8	5.3	6.6	9.8	6.9	5.8	17	34	17	32	9.6
10	6.3	6.7	5.1	6.6	9.5	7.1	5.3	13	26	15	15	9.2
11	6.3	6.3	5.2	8.3	9.0	8.2	4.8	18	25	15	7.4	9.0
12	6.3	6.2	5.5	5.3	8.8	7.1	4.4	30	27	14	9.6	9.0
13	5.8	6.1	5.0	5.1	8.6	6.4	4.5	47	37	11	10	9.5
14	5.8	6.0	4.8	5.1	8.3	6.4	4.1	52	42	8.4	e30	9.6
15	5.8	6.1	5.1	5.1	8.3	6.1	3.8	37	45	9.9	e22	9.5
16	5.9	6.1	4.9	5.2	8.5	6.2	4.8	70	51	12	e19	9.2
17	5.9	6.1	4.8	5.7	8.6	6.3	5.1	158	71	11	e12	8.8
18	6.0	6.1	5.5	5.7	8.3	11	6.7	80	74	10	e12	9.6
19	6.1	6.3	4.9	42	10	7.9	6.7	57	40	11	e12	9.8
20	6.2	8.6	5.1	8.9	17	6.7	5.8	58	36	9.7	e12	9.3
21	6.3	6.7	e4.7	6.8	8.2	6.4	5.2	66	37	9.3	e13	8.7
22	6.3	6.3	e4.8	6.4	7.6	6.2	5.1	85	40	9.6	e12	8.7
23	6.3	6.2	e4.9	6.0	7.5	6.1	6.2	76	40	9.5	e12	8.5
24	6.8	5.2	e4.5	5.4	10	5.7	9.3	70	40	10	e11	8.6
25	7.5	4.8	e4.5	5.2	9.3	5.2	7.0	69	35	9.9	e12	8.9
26	6.3	5.0	e3.9	5.2	8.0	5.4	8.3	71	33	8.6	e12	8.7
27	6.1	5.1	e4.0	5.2	7.3	7.3	12	e155	32	9.0	e12	8.7
28	6.3	5.8	4.0	5.1	7.3	8.8	33	e80	32	10	e11	8.7
29	6.2	5.3	4.9	5.0	---	7.9	40	e77	32	9.4	e11	8.7
30	5.3	4.7	e4.8	9.7	---	7.0	20	e80	32	13	e11	8.7
31	55	---	5.1	10	---	6.4	---	e75	---	14	e11	---
TOTAL	241.8	197.5	153.4	220.6	254.8	213.2	254.5	1677	1285	436.3	458.0	278.8
MEAN	7.80	6.58	4.95	7.12	9.10	6.88	8.48	54.1	42.8	14.1	14.8	9.29
MAX	55	12	5.5	42	17	11	40	158	74	30	45	11
MIN	5.3	4.7	3.9	4.6	7.3	5.2	3.8	13	25	8.4	7.4	8.5
AC-FT	480	392	304	438	505	423	505	3330	2550	865	908	553

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1993, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	9.02	9.69	8.09	6.49	6.77	6.67	8.69	28.1	28.6	14.0	12.4	10.5
MAX	17.1	25.0	12.1	12.7	12.0	13.0	16.5	79.1	108	46.7	24.0	23.1
(WY)	1985	1988	1984	1984	1984	1984	1984	1984	1983	1983	1983	1984
MIN	4.89	4.54	4.25	3.93	4.04	3.83	4.39	4.61	5.44	6.78	6.48	5.93
(WY)	1992	1990	1990	1990	1990	1986	1990	1990	1990	1990	1990	1988

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1982 - 1993

ANNUAL TOTAL	3539.7	5670.9	
ANNUAL MEAN	9.67	15.5	
HIGHEST ANNUAL MEAN			12.4
LOWEST ANNUAL MEAN			25.3
HIGHEST DAILY MEAN	92	May 27	1983
LOWEST DAILY MEAN	3.9	Apr 12	1990
ANNUAL SEVEN-DAY MINIMUM	4.4	Apr 7	1986
ANNUAL RUNOFF (AC-FT)	7020		
10 PERCENT EXCEEDS	12		
50 PERCENT EXCEEDS	7.1		
90 PERCENT EXCEEDS	4.6		

e Estimated

## 49

LOCATION.--Lat. 41°30'59", long 109°26'54", in NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub> sec.26, T.18 N., R.107 W., Sweetwater County, Hydrologic Unit 14040106, on right bank 0.1 mi downstream from Bitter Creek, 1.0 mi southeast of town of Green River, and 4.0 mi upstream from high-water line of Flaming Gorge Reservoir.

PERIOD OF RECORD.--April 1951 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 24 to Mar. 21. Records good except those for estimated daily discharges, which are poor. Some regulation by Fontenelle Reservoir since August 1963. (See station 09211150.) Natural flow of stream affected by transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 223,000 acres upstream from station. National Weather Service satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1993, BY WATER YEAR (WY)												
MEAN	954	817	676	693	786	1007	1697	2653	4905	3251	1594	1161
MAX	3109	1844	1419	1382	1980	1852	3416	5665	11700	9415	3577	7746
(WY)	1983	1984	1972	1972	1974	1974	1962	1952	1986	1986	1982	1965
MIN	279	281	272	266	267	350	516	434	414	368	372	251
(WY)	1989	1989	1989	1989	1989	1989	1968	1992	1977	1977	1977	1988

a Maximum daily, estimated.  
b Caused by emergency release from Fontenelle Reservoir.

## GREEN RIVER BASIN

09217900 BLACKS FORK NEAR ROBERTSON, WY

LOCATION.--Lat 40°57'33", long 110°34'46", in SW<sup>1</sup>/<sub>4</sub>,SW<sup>1</sup>/<sub>4</sub>,SW<sup>1</sup>/<sub>4</sub> sec.27, T.3 N., R.12 E., Summit County, UT, Hydrologic Unit 14040107, on left bank 1 mi downstream from East Fork, 2.7 mi south of Utah-Wyoming State line, and 18 mi south of Robertson.

DRAINAGE AREA.--130 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1937 to July 1939 (published as "at Blacks Fork Ranger Station"), July 1966 to September 1986, October 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,811.3 ft above sea level (Bureau of Reclamation bench mark). Datums published from October 1968 to September 1978 are incorrect. October 1937 to July 1939, at site 970 ft downstream at different datum, July 1966 to September 1986 and October 1992 to September 1993 at site 0.2 mi downstream at datum 6.5 ft lower.

REMARKS.--Estimated daily discharges: Oct. 1-28, Nov. 3-6, 9-17, Nov. 19 to May 10, and June 14-16. Records fair except those for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 27	0100	1,540	3.33	June 14	unknown	*a1,680	*b3.47

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	33	29	23	18	18	40	44	1130	650	231	76
2	20	31	27	25	19	19	38	50	1070	657	221	70
3	20	31	26	25	20	18	35	65	907	662	208	67
4	20	30	25	24	20	17	32	80	746	557	212	65
5	22	32	27	23	19	19	34	95	749	455	204	67
6	21	35	29	22	18	20	35	100	768	393	189	64
7	21	38	29	23	18	21	37	80	768	368	177	62
8	22	37	30	23	17	21	35	65	768	362	193	52
9	23	33	30	24	18	20	36	60	785	353	197	48
10	24	30	29	23	18	20	38	80	866	376	189	46
11	22	31	30	21	19	19	40	102	1040	399	204	45
12	21	33	27	22	19	18	37	148	1270	393	189	42
13	23	37	26	21	18	20	35	187	1330	390	165	43
14	22	41	27	20	17	25	33	230	1440	362	152	43
15	22	38	26	21	16	30	35	302	1400	339	145	41
16	21	33	24	22	15	40	40	393	1330	321	134	42
17	22	30	23	22	14	22	48	469	988	296	124	50
18	22	28	24	21	15	28	42	547	793	277	115	61
19	22	25	24	20	15	40	38	590	786	266	120	55
20	21	23	23	21	15	34	42	646	945	256	126	46
21	20	21	22	22	16	30	40	828	1070	246	140	40
22	21	25	24	23	18	32	45	950	991	246	115	38
23	23	23	25	23	17	40	48	806	838	306	109	36
24	24	20	26	22	17	50	50	815	700	366	100	35
25	25	18	24	21	16	60	43	893	676	259	95	34
26	25	22	23	20	15	45	45	1110	742	316	108	32
27	30	24	24	19	15	37	50	1170	779	267	94	32
28	36	27	24	18	16	40	50	1040	774	229	89	30
29	36	24	25	18	---	47	54	1020	769	224	85	30
30	35	22	24	19	---	45	50	1100	692	253	82	29
31	35	---	22	18	---	43	---	1120	---	241	80	---
TOTAL	741	875	798	669	478	938	1225	15185	27910	11085	4592	1421
MEAN	23.9	29.2	25.7	21.6	17.1	30.3	40.8	490	930	358	148	47.4
MAX	36	41	30	25	20	60	54	1170	1440	662	231	76
MIN	20	18	22	18	14	17	32	44	676	224	80	29
AC-FT	1470	1740	1580	1330	948	1860	2430	30120	55360	21990	9110	2820

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1993, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	55.5	41.9	33.8	26.4	23.7	25.9	50.8	402	800	336	113	69.7																
MAX	136	62.0	50.0	41.4	36.9	38.6	112	789	1273	1003	232	157																
(WY)	1983	1974	1974	1974	1974	1969	1985	1984	1983	1975	1983	1982																
MIN	23.9	24.2	11.1	6.73	9.32	10.2	19.4	134	406	115	57.4	37.3																
(WY)	1993	1978	1977	1977	1977	1977	1975	1975	1976	1977	1976	1976																

## SUMMARY STATISTICS

ANNUAL TOTAL  
ANNUAL MEAN  
HIGHEST ANNUAL MEAN  
LOWEST ANNUAL MEAN  
HIGHEST DAILY MEAN  
LOWEST DAILY MEAN  
ANNUAL SEVEN-DAY MINIMUM  
INSTANTANEOUS PEAK FLOW  
INSTANTANEOUS PEAK STAGE  
ANNUAL RUNOFF (AC-FT)  
10 PERCENT EXCEEDS  
50 PERCENT EXCEEDS  
90 PERCENT EXCEEDS

## FOR 1993 WATER YEAR

65917  
181  
---  
1440  
14  
15  
1680a  
3.47b  
130700  
747  
36  
19

## WATER YEARS 1966 - 1993

---  
165  
228  
79.3  
1880  
5.5  
5.8  
2480  
4.91c  
119800  
509  
46  
21

a About.

b Estimated from fragmentary gage height record.

c Site and datum then in use.



## GREEN RIVER BASIN

51

09218500 BLACKS FORK NEAR MILLBURNE, WY

LOCATION.--Lat 41°01'54", long 110°34'43", in NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec.11, T.12 N., R.117 W., Uinta County, Hydrologic Unit 14040107, on left bank 0.4 mi downstream from Meeks Cabin Dam, 2.7 mi north of Utah-Wyoming State line, and 17 mi southwest of Millburne.

DRAINAGE AREA.--152 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1992). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 929: 1940.

GAGE.--Water-stage recorder. Datum of gage is 8,512.27 ft above sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1971, at several sites about 2.0 mi downstream at various datums.

REMARKS.--Estimated daily discharges: May 1-9. Records good except those for estimated daily discharges, which are poor. Flow completely regulated by Meeks Cabin Reservoir, capacity, 32,470 acre-ft, since June 1971. Result of discharge measurement, in cubic feet per second, made during period when station was not in operation, is given below:

Oct. 20 . . . 26.5

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	13	821	748	351	137
2	---	---	---	---	---	---	---	13	839	721	351	137
3	---	---	---	---	---	---	---	13	832	721	291	137
4	---	---	---	---	---	---	---	13	831	712	251	137
5	---	---	---	---	---	---	---	13	832	704	248	137
6	---	---	---	---	---	---	---	13	832	662	248	135
7	---	---	---	---	---	---	---	13	827	638	248	161
8	---	---	---	---	---	---	---	13	742	607	248	182
9	---	---	---	---	---	---	---	13	664	541	248	182
10	---	---	---	---	---	---	---	13	646	514	237	182
11	---	---	---	---	---	---	---	14	646	514	227	182
12	---	---	---	---	---	---	---	15	646	337	227	182
13	---	---	---	---	---	---	---	15	653	367	227	182
14	---	---	---	---	---	---	---	27	653	487	227	197
15	---	---	---	---	---	---	---	39	653	555	227	207
16	---	---	---	---	---	---	---	39	662	527	227	207
17	---	---	---	---	---	---	---	192	662	520	182	207
18	---	---	---	---	---	---	---	428	662	520	150	207
19	---	---	---	---	---	---	---	517	660	520	147	207
20	---	---	---	---	---	---	---	586	654	500	147	207
21	---	---	---	---	---	---	---	647	665	487	147	252
22	---	---	---	---	---	---	---	654	687	481	147	287
23	---	---	---	---	---	---	---	676	692	481	147	287
24	---	---	---	---	---	---	---	679	704	481	160	287
25	---	---	---	---	---	---	---	686	712	475	171	287
26	---	---	---	---	---	---	---	700	721	462	171	283
27	---	---	---	---	---	---	---	704	757	398	171	276
28	---	---	---	---	---	---	---	728	775	351	171	285
29	---	---	---	---	---	---	---	748	784	351	171	296
30	---	---	---	---	---	---	---	752	794	351	171	287
31	---	---	---	---	---	---	---	782	---	351	152	---
TOTAL	---	---	---	---	---	---	---	9758	21708	16084	6488	6339
MEAN	---	---	---	---	---	---	---	315	724	519	209	211
MAX	---	---	---	---	---	---	---	782	839	748	351	296
MIN	---	---	---	---	---	---	---	13	646	337	147	135
AC-FT	---	---	---	---	---	---	---	19350	43060	31900	12870	12570

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1992, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1940	58.9	199	1985	28.9	1978
1941	39.5	137	1986	11.6	1979
1942	29.1	52.7	1987	8.47	1980
1943	26.4	47.8	1988	7.92	1981
1944	25.3	57.2	1989	6.10	1982
1945	28.4	71.7	1990	6.54	1983
1946	58.3	297	1991	7.37	1984
1947	406	743	1992	91.6	1985
1948	703	1484	1993	237	1986
1949	339	1081	1994	65.9	1987
1950	127	317	1995	34.1	1988
1951	85.2	196	1996	31.5	1989
1952	1983	1983	1997	1946	1990

## SUMMARY STATISTICS

	FOR 1993 WATER YEAR*	WATER YEARS 1940 - 1992
ANNUAL MEAN	---	161a
HIGHEST ANNUAL MEAN	---	281
LOWEST ANNUAL MEAN	---	82.9
HIGHEST DAILY MEAN	839 Jun 2	2180 Jun 7 1957
LOWEST DAILY MEAN	13 May 1-10	1.0 Sep 15, 16 1983
ANNUAL SEVEN-DAY MINIMUM	---	5.7 Nov 7 1970
INSTANTANEOUS PEAK FLOW	842 Jun 1	2530b Jun 7 1957#
INSTANTANEOUS PEAK STAGE	4.00 Jun 1	6.76c Jun 12 1965#
ANNUAL RUNOFF (AC-FT)	---	116600
10 PERCENT EXCEEDS	---	507
50 PERCENT EXCEEDS	---	44
90 PERCENT EXCEEDS	---	14

\* During period of operation.

# For period of record through 1993.

a Unadjusted.

b From rating curve extended above 1,500 ft<sup>3</sup>/s.

c From floodmarks, site and datum then in use.

## GREEN RIVER BASIN

09220000 EAST FORK OF SMITHS FORK NEAR ROBERTSON, WY

LOCATION.--Lat 41°03'15", long 110°23'52", in NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, sec.5, T.12 N., R.115 W., Uinta County, Hydrologic Unit 14040107, Wasatch National Forest, on left bank 60 ft downstream from bridge, 1.0 mi upstream from Gilbert Creek, 6.1 mi downstream from State Line Reservoir, and 9.0 mi south of Robertson.

DRAINAGE AREA.--53.0 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1939 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313. Prior to Oct. 1, 1978, published as East Fork of Smith Fork near Robertson.

REVISED RECORDS.--WSP 979: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,470 ft above sea level, from topographic map. Prior to July 12, 1957, at datum 3.96 ft higher.

REMARKS.--Estimated daily discharges: May 1-6, 12 and July 13-19. Records poor. Flow completely regulated by State Line Reservoir, 6.1 mi upstream, total capacity, 14,000 acre-ft, dead storage is about 2,000 acre-ft, since May 1979.

COOPERATION.--Records provided by Office of the Wyoming State Engineer and reviewed by the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	16	95	146	85	43
2	---	---	---	---	---	---	---	16	98	140	92	48
3	---	---	---	---	---	---	---	16	105	129	87	56
4	---	---	---	---	---	---	---	16	109	121	88	56
5	---	---	---	---	---	---	---	16	82	109	88	57
6	---	---	---	---	---	---	---	16	74	88	87	56
7	---	---	---	---	---	---	---	18	80	74	83	56
8	---	---	---	---	---	---	---	20	82	80	85	56
9	---	---	---	---	---	---	---	22	82	87	87	52
10	---	---	---	---	---	---	---	23	83	83	95	47
11	---	---	---	---	---	---	---	22	85	83	92	46
12	---	---	---	---	---	---	---	22	82	85	73	45
13	---	---	---	---	---	---	---	16	83	80	65	45
14	---	---	---	---	---	---	---	26	92	83	65	45
15	---	---	---	---	---	---	---	26	102	100	65	45
16	---	---	---	---	---	---	---	26	111	110	64	52
17	---	---	---	---	---	---	---	34	115	109	64	57
18	---	---	---	---	---	---	---	62	102	108	65	57
19	---	---	---	---	---	---	---	73	102	108	62	56
20	---	---	---	---	---	---	---	82	102	107	59	53
21	---	---	---	---	---	---	---	80	105	113	59	50
22	---	---	---	---	---	---	---	87	107	100	57	49
23	---	---	---	---	---	---	---	85	111	85	59	42
24	---	---	---	---	---	---	---	82	113	90	60	36
25	---	---	---	---	---	---	---	80	125	98	60	35
26	---	---	---	---	---	---	---	82	127	104	52	35
27	---	---	---	---	---	---	---	84	133	100	43	35
28	---	---	---	---	---	---	---	88	149	102	43	34
29	---	---	---	---	---	---	---	92	163	93	42	34
30	---	---	---	---	---	---	---	92	163	82	42	26
31	---	---	---	---	---	---	---	95	---	83	43	---
TOTAL	---	---	---	---	---	---	---	1515	3162	3080	2111	1404
MEAN	---	---	---	---	---	---	---	48.9	105	99.4	68.1	46.8
MAX	---	---	---	---	---	---	---	95	163	146	95	57
MIN	---	---	---	---	---	---	---	16	74	74	42	26
AC-FT	---	---	---	---	---	---	---	3010	6270	6110	4190	2780

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1971, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
MEAN	15.9	10.9	8.10	7.15	7.19	8.00	20.5	126	216	88.9	33.7	19.6																					
MAX	34.8	19.0	16.9	16.4	13.4	15.0	90.0	201	430	269	120	59.8																					
(WY)	1962	1952	1966	1966	1966	1943	1946	1952	1965	1965	1965	1965																					
MIN	5.21	5.50	2.11	1.34	1.55	2.14	5.01	31.6	59.3	15.9	6.64	6.68																					
(WY)	1957	1957	1963	1963	1963	1963	1970	1953	1954	1940	1940	1956																					

## SUMMARY STATISTICS

	FOR 1993 WATER YEAR*	WATER YEARS 1939 - 1971
ANNUAL MEAN	---	47.1
HIGHEST ANNUAL MEAN	---	88.9
LOWEST ANNUAL MEAN	---	25.4
HIGHEST DAILY MEAN	163 Jun 29,30	1030 Jun 10 1965
LOWEST DAILY MEAN	16 May 1-6	1.0 Dec 17 1962
ANNUAL SEVEN-DAY MINIMUM	---	1.0 Dec 17 1962
INSTANTANEOUS PEAK FLOW	173 Jun 29	1450 Jun 10 1965#
INSTANTANEOUS PEAK STAGE	4.76 Jun 29	6.75 Jun 10 1965#
ANNUAL RUNOFF (AC-FT)	---	34160
10 PERCENT EXCEEDS	---	140
50 PERCENT EXCEEDS	---	13
90 PERCENT EXCEEDS	---	5.6

\* During period of operation.

# For period of record through 1993.

## 53

LOCATION.--Lat 41°00'45", long 109°40'20", in NW1/4, NW1/4, sec.23, T.12 N., R.109 W., Sweetwater County, WY, Hydrologic Unit 14040106, on right bank 0.8 mi north of Wyoming-Utah State line, 1.3 mi upstream from normal high-water line of Flaming Gorge Reservoir at elevation 6,045 ft, and 3.0 mi northeast of Manila, UT.

PERIOD OF RECORD.--October 1928 to September 1993 (discontinued). Prior to October 1971, published as "at Linwood, UT."

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above sea level, from topographic map. Prior to Oct. 1, 1957, nonrecording gages or water-stage recorder at several sites about 2.0 mi downstream at various datums. Oct. 1, 1957, to Dec. 2, 1965, water-stage recorders at sites about 1.0 mi upstream at different datums.

REMARKS.--Estimated daily discharges: Nov. 26 to Mar. 11. Records fair except those for estimated daily discharges, which are poor. Peoples Irrigation Canal diverts 5.9 mi upstream. Natural flow of stream affected by transbasin diversions, small storage reservoirs, diversions for irrigation, and return flow from irrigated areas.

a Maximum discharge determined, gage height, 7.19 ft, site and datum then in use, from floodmarks, from rating curve extended above 570 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.  
b From floodmarks.  
c Site and datum then in use, discharge not determined.

## GREEN RIVER BASIN

## 09234400 FLAMING GORGE RESERVOIR AT FLAMING GORGE DAM, UT

LOCATION.--Lat 40°54'23", long 109°25'15", in NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, sec.15, T.2 N., R.22 E., Daggett County, Hydrologic Unit 14040106, at Flaming Gorge Dam on Green River, 1.8 mi southwest of Dutch John, and 4.9 mi northeast of Greendale.

DRAINAGE AREA.--19,350 mi<sup>2</sup>, of which about 4,260 mi<sup>2</sup>, including 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--November 1962 to current year.

REVISED RECORDS.--WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,871 ft above sea level, (levels by Bureau of Reclamation). Prior to Jan. 1, 1964, on left bank 600 ft upstream from face of dam.

REMARKS.--Records good. Reservoir is formed by concrete arch-type dam; storage began Nov. 1, 1962; mass concrete of dam completed Nov. 15, 1962. Total capacity, 3,789,000 acre-ft, consisting of the following: Dead storage, 39,700 acre-ft below elevation 5,740 ft; inactive usable storage, 233,500 acre-ft between elevations 5,740 ft and 5,871 ft; active usable storage, 3,516,000 acre-ft between elevations 5,871 ft and 6,040 ft (top of conservation pool). Reservoir is used for flood control, storage replacement to meet downstream requirements under the Colorado River Compact of 1922, and power development. Figures given herein represent usable contents. Transbasin diversions and diversions for irrigation above station.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 3,911,000 acre-ft July 13, 1983, elevation, 6,043.80 ft; minimum, 582,900 acre-ft Apr. 26, 1965, elevation, 5908.90 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 3,492,000 acre-ft Aug. 29, elevation, 6,033.73 ft; minimum observed, 2,992,000 acre-ft Feb. 9-15, elevation, 6,020.43 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

6,020	2,977,000	6,030	3,346,000
6,025	3,157,000	6,034	3,503,000

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3105	3070	3048	3013	2995	2996	3070	3119	3204	3299	3391	3489
2	3103	3069	3046	3012	2995	2996	3073	3119	3206	3305	3395	3489
3	3102	3068	3045	3011	2994	2996	3074	3123	3208	3307	3399	3488
4	3100	3067	3044	3010	2994	2996	3075	3126	3210	3310	3404	3488
5	3099	3066	3042	3009	2994	2997	3078	3130	3215	3313	3409	3488
6	3097	3066	3041	3009	2993	2997	3081	3133	3216	3316	3415	3487
7	3096	3066	3040	3008	2993	2997	3083	3136	3218	3318	3421	3487
8	3095	3065	3039	3006	2993	2998	3085	3140	3219	3322	3425	3486
9	3093	3064	3038	3006	2992	2999	3089	3142	3222	3324	3432	3485
10	3092	3062	3036	3005	2992	2999	3088	3145	3224	3328	3437	3484
11	3090	3061	3035	3005	2992	3002	3091	3148	3226	3330	3443	3484
12	3089	3060	3034	3004	2992	3003	3093	3150	3227	3334	3447	3483
13	3087	3059	3032	3004	2992	3003	3093	3152	3228	3337	3452	3482
14	3086	3058	3031	3003	2992	3006	3096	3156	3230	3341	3456	3481
15	3084	3057	3030	3002	2992	3006	3097	3158	3230	3342	3461	3481
16	3083	3056	3028	3001	2993	3008	3098	3155	3237	3345	3466	3480
17	3082	3055	3027	3000	2994	3011	3098	3155	3237	3347	3469	3479
18	3081	3054	3026	3000	2994	3013	3102	3158	3242	3349	3472	3478
19	3080	3055	3025	2999	2995	3015	3103	3162	3245	3351	3476	3478
20	3079	3056	3024	2999	2995	3020	3104	3163	3250	3352	3477	3478
21	3077	3055	3023	2999	2995	3029	3105	3165	3251	3353	3482	3478
22	3076	3053	3022	2998	2995	3034	3106	3169	3258	3355	3483	3477
23	3075	3053	3021	2998	2994	3038	3107	3173	3264	3356	3484	3476
24	3075	3053	3020	2998	2995	3040	3108	3180	3268	3358	3486	3476
25	3074	3052	3019	2997	2995	3043	3109	3185	3273	3360	3489	3475
26	3073	3051	3017	2997	2995	3048	3110	3187	3278	3365	3489	3474
27	3072	3050	3017	2997	2995	3050	3112	3188	3280	3367	3490	3473
28	3071	3050	3016	2997	2995	3057	3114	3191	3288	3371	3491	3473
29	3071	3049	3015	2996	---	3061	3115	3195	3291	3375	3492	3472
30	3071	3049	3015	2996	---	3063	3116	3198	3296	3380	3490	3471
31	3071	---	3014	2996	---	3068	---	3202	---	3384	3491	---
MAX	3100	3070	3050	3010	2990	3070	3120	3200	3300	3380	3490	3490
MIN	3070	3050	3010	3000	2990	3000	3070	3120	3200	3300	3390	3470
(#)	6022.65	6022.02	6021.05	6020.53	6020.52	6022.56	6023.85	6026.20	6028.67	6030.97	6033.68	6033.17
(*)	-35	-22	-35	-18	-1	+73	+48	+86	+94	+88	+107	-20

CAL YR 1992 . . . . . (\*) -314  
WTR YR 1993 . . . . . (\*) +365

(#) Elevation, in feet, at end of month.

(\*) Change in contents, in thousands of acre-feet.

## GREEN RIVER BASIN

55

09234500 GREEN RIVER NEAR GREENDALE, UT

LOCATION.--Lat 40°54'30", long 109°25'20", in NW¼, NW¼, SE¼, sec. 15, T. 2 N., R. 22 E., Daggett County, Hydrologic Unit 14040106, Ashley National Forest on right bank 0.5 mi downstream from Flaming Gorge Dam, 2 mi south of Dutch John, 4 mi northeast of Greendale, and 407 mi from mouth.

DRAINAGE AREA.--19,350 mi<sup>2</sup>, approximately, including about 4,260 mi<sup>2</sup> which is probably noncontributing. This noncontributing area includes 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,594.48 ft above sea level. Prior to Sept. 2, 1959, water-stage recorder at site 2.2 mi upstream at different datum. Sept. 3, 1959, to Sept. 30, 1985, at datum 5.0 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Flaming Gorge Reservoir 0.5 mi upstream, beginning Nov. 1, 1962 (see station 09234400).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft<sup>3</sup>/s June 12, 1957, gage height, 10.60 ft, site and datum then in use; maximum gage height, 14.51 ft May 12, June 6, 1986, datum then in use; minimum, 2.3 ft<sup>3</sup>/s Mar. 20, 22, 27, 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,660 ft<sup>3</sup>/s May 27, June 03, gage height, 11.66 ft; minimum daily discharge, 884 ft<sup>3</sup>/s July 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	897	897	995	999	1060	1090	956	950	3910	910	927	1400
2	900	894	956	999	1040	1100	1300	991	4620	902	929	1370
3	901	897	1010	1000	1040	1110	1270	1090	4620	901	948	1430
4	901	1010	996	990	1040	1100	1070	993	4620	903	928	1350
5	906	900	995	1070	1050	1090	1140	1220	4610	905	894	1380
6	904	1010	997	1040	1070	1080	1140	1360	4610	904	991	1340
7	904	940	997	1040	1060	1110	1050	1290	4610	904	1060	1420
8	905	1020	996	1030	1060	1110	1000	944	4600	920	1100	1440
9	904	1020	999	1050	1060	1080	956	1130	4610	1010	1120	1460
10	903	997	1020	1070	1060	1090	956	1170	4610	893	1080	1440
11	907	994	1050	1070	1070	1100	956	1230	4610	893	1040	1430
12	929	994	999	1070	1090	1100	963	1500	4600	893	985	1430
13	902	993	998	1070	1090	1110	963	1300	4600	896	1020	1440
14	900	994	1000	1070	1090	1110	963	1640	4610	896	983	1440
15	905	994	1000	1070	1090	1100	962	2410	4610	899	978	1420
16	902	993	999	1070	1080	1130	1070	3170	4120	884	1040	1430
17	902	992	1010	1070	1070	1110	992	3650	3690	885	1110	1430
18	902	994	999	1070	1070	1120	1070	2050	3200	885	1130	1440
19	902	995	998	1070	1070	2220	955	2050	3010	885	1100	1440
20	903	995	999	1050	1070	956	1140	2400	2510	885	1270	1440
21	903	996	1000	1050	1070	1050	1260	3160	2250	889	1270	1440
22	903	995	999	1050	1070	986	950	1900	1730	892	1080	1330
23	1110	997	999	1050	1080	1120	1120	1330	1340	889	1250	1330
24	900	996	1000	1050	1040	1060	1130	986	915	887	1270	1330
25	902	997	999	1050	1080	1020	1130	1930	886	888	1270	1330
26	902	996	999	1060	1090	1150	1240	2990	893	889	1290	1220
27	895	996	1000	1060	1080	956	1280	4610	895	926	1290	1340
28	894	996	999	1060	1080	957	1300	4050	938	971	1290	1340
29	894	997	1000	1060	---	968	1600	3770	897	933	1290	1320
30	895	998	1010	1040	---	1110	1030	3600	898	934	1290	1340
31	894	---	1000	1080	---	1040	---	3600	---	931	1300	---
TOTAL	28171	29487	31018	32578	29920	34433	32912	64464	96622	28082	34523	41690
MEAN	909	983	1001	1051	1069	1111	1097	2079	3221	906	1114	1390
MAX	1110	1020	1050	1080	1090	1220	1600	4610	4620	1010	1300	1460
MIN	894	894	956	990	1040	956	950	944	886	884	894	1220
AC-FT	55880	58490	61520	64620	59350	68300	65280	127900	191600	55700	68480	82690

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1993, BY WATER YEAR (WY)

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
MEAN	1626	1655	1754	1729	1755	1627	2059	2798	3566	2628	1936	1603	
MAX	3911	3655	3626	4145	4090	3818	6288	9610	11420	10130	5055	3729	
(WY)	1983	1983	1973	1985	1984	1977	1962	1952	1957	1983	1983	1983	
MIN	128	90.0	268	367	442	106	134	130	125	104	102	113	
(WY)	1964	1963	1963	1963	1955	1963	1963	1963	1963	1963	1963	1963	

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1951 - 1993
ANNUAL TOTAL	504478	483900	
ANNUAL MEAN	1378	1326	2062
HIGHEST ANNUAL MEAN			4270
LOWEST ANNUAL MEAN			231
HIGHEST DAILY MEAN	4310	4620	19200
LOWEST DAILY MEAN	846	884	40
ANNUAL SEVEN-DAY MINIMUM	853	886	57
ANNUAL RUNOFF (AC-FT)	1001000	959800	1494000
10 PERCENT EXCEEDS	2300	1910	3860
50 PERCENT EXCEEDS	1100	1050	1580
90 PERCENT EXCEEDS	868	901	654



## GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1956 to September 1959, October 1963 to current year.

WATER TEMPERATURES: October 1956 to September 1959, October 1963 to current year.

SEDIMENT DATA: October 1956 to September 1959.

INSTRUMENTATION.--Water-quality monitor since December 1986.

REMARKS.--Storage in Flaming Gorge Reservoir began on Nov. 1, 1962. Samples for daily records are taken inside Penstock. Extremes are given for two separate periods--water years 1957-62, and water years 1964 to current year. Extremes for the 1963 water year (October 1962 to September 1963) are not included. Unpublished daily records of specific conductance obtained before 1965 were included in the determination of extremes for period of daily record and are available in files of district office. Daily records provided by Bureau of Reclamation. Water-quality monitor located in separate shelter 0.6 mi downstream from Flaming Gorge Dam.

EXTREMES FOR PERIOD OF DAILY RECORD (water years 1957-62, 1964 to current year).--

SPECIFIC CONDUCTANCE (water years 1957-58, 1960-62): Maximum daily, 1,340 microsiemens Aug. 30, 1961; minimum

daily, 325 microsiemens June 2, 1961.

WATER TEMPERATURES (water years 1957-59): Maximum, 24.0°C July 24, 25, 1959; minimum, 0.0°C on many days

during winter period each year.

SPECIFIC CONDUCTANCE (water years 1964 to current year): Maximum daily, 1,060 microsiemens Nov. 9, 1971;

minimum recorded, 550 microsiemens June 25, July 4, 1987.

WATER TEMPERATURES: Maximum recorded, 17.2°C July 9, 1989; minimum recorded 1.6°C Mar. 1, 2, 1987.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 800 microsiemens Aug. 26; minimum recorded, 652 microsiemens

June 15, 23.

WATER TEMPERATURES: Maximum recorded, 14.5°C Oct. 6, 7; minimum recorded, 6.4°C May 19.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME SECOND	DIS- CHARGE, INST. CUBIC FEET PER (US/CM)	SPE- CIFIC CON- DUCT- ANCE (UNITS)	PH WATER WHOLE FIELD (STAND- ARD (DEG C)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (MG/L)	OXYGEN, DIS- SOLVED HG)	BARO- METRIC PRES- SURE (MM OF CAO3)	HARD- NESS TOTAL (MG/L AS AS CA)	CALCIUM DIS- SOLVED (MG/L AS MG)	MAGNE- SIUM, DIS- SOLVED (MG/L)
OCT, 1992											
06...	1330	902	730	8.3	22.0	11.5	8.3	620	250	61	24
DEC											
08...	1530	881	750	8.4	-0.5	4.5	8.6	618	260	62	25
MAR, 1993											
09...	1500	910	770	8.3	9.0	3.0	9.1	625	270	64	26
MAY											
12...	1330	2800	740	8.4	27.0	13.0	--	--	250	59	24
JUL											
13...	1530	897	710	8.3	27.0	12.5	8.6	618	240	59	23
SEP											
14...	1400	1490	750	8.5	26.0	13.0	--	--	250	60	25

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)
OCT, 1992										
06...	58	33	2	2.8	200	16	0.30	2.7	473	457
DEC										
08...	60	33	2	2.6	200	18	0.30	2.9	474	463
MAR, 1993										
09...	64	34	2	2.8	220	19	0.20	3.6	470	495
MAY										
12...	58	34	2	2.7	210	18	0.30	3.7	476	467
JUL										
13...	57	34	2	2.4	200	17	0.30	3.0	464	446
SEP										
14...	63	35	2	3.0	210	18	0.30	2.9	470	473

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)
OCT, 1992										
06...	0.64	1150	0.043	0.043	--	--	<0.20	--	--	--
DEC										
08...	0.64	1130	0.070	0.070	--	0.30	0.30	--	0.37	1.6
MAR, 1993										
09...	0.64	1150	0.097	--	0.097	--	--	<0.20	--	--
MAY										
12...	0.65	3600	0.057	--	0.057	0.30	0.30	--	0.36	--
JUL										
13...	0.63	1120	0.030	--	0.030	--	<0.20	--	--	--
SEP										
14...	0.64	1890	0.029	--	0.029	0.20	0.20	--	0.23	--

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
OCT, 1992		
06...	1330	<1
DEC		
08...	1530	1
MAR, 1993		
09...	1500	<1
MAY		
12...	1330	1
JUL		
13...	1530	<1
SEP		
14...	1400	1

[illegible]

## GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	793	778	789	753	738	747
2	---	---	---	---	---	---	794	741	767	750	725	742
3	---	---	---	---	---	---	760	743	751	759	738	748
4	---	---	---	---	---	---	769	756	761	752	738	746
5	---	---	---	---	---	---	759	753	756	754	720	733
6	---	---	---	---	---	---	756	748	750	760	740	752
7	---	---	---	---	---	---	754	750	752	758	720	739
8	---	---	---	---	---	---	757	750	753	733	691	715
9	---	---	---	795	789	791	762	751	757	726	701	715
10	---	---	---	795	793	794	756	752	754	747	723	735
11	---	---	---	795	793	794	756	749	752	749	715	736
12	---	---	---	795	793	795	756	752	753	748	720	733
13	---	---	---	795	793	794	755	746	750	723	695	713
14	---	---	---	796	793	794	760	749	756	729	706	721
15	---	---	---	795	792	794	762	754	759	739	711	722
16	---	---	---	795	791	793	763	748	757	728	676	708
17	---	---	---	794	791	792	759	750	756	731	684	713
18	---	---	---	793	791	792	758	752	755	720	680	705
19	---	---	---	794	792	792	754	747	751	734	682	714
20	---	---	---	794	792	793	760	751	755	748	709	721
21	---	---	---	794	792	793	775	759	768	728	687	714
22	---	---	---	795	792	793	770	756	765	730	689	714
23	---	---	---	795	792	794	762	756	760	717	690	706
24	---	---	---	795	793	794	762	744	756	722	601	710
25	---	---	---	795	793	794	761	750	756	731	678	714
26	---	---	---	796	793	794	762	749	754	729	685	712
27	---	---	---	794	789	792	757	743	751	734	702	717
28	---	---	---	795	789	792	754	743	748	758	700	721
29	---	---	---	794	789	791	758	719	751	759	702	723
30	---	---	---	793	785	790	745	719	732	772	722	730
31	---	---	---	793	786	791	---	---	---	737	694	728
MONTH	---	---	---	---	---	---	794	719	756	772	676	724
	JUNE			JULY			AUGUST			SEPTEMBER		
1	740	694	729	708	695	701	780	741	747	792	747	755
2	736	695	727	742	695	705	792	740	747	763	750	754
3	741	722	731	738	697	704	779	741	747	759	749	755
4	766	722	738	715	699	704	758	747	751	761	749	753
5	779	725	734	715	705	707	758	743	747	760	750	754
6	769	724	734	738	701	707	775	739	748	758	751	755
7	735	712	725	752	700	709	759	742	747	763	754	757
8	718	694	706	713	700	708	748	742	744	776	751	757
9	712	697	704	712	699	707	755	741	747	761	751	756
10	727	702	713	711	697	703	748	745	747	763	749	754
11	753	689	710	709	698	702	788	741	750	757	750	754
12	718	684	693	716	702	706	754	745	749	762	752	755
13	693	677	687	759	707	715	768	745	751	782	752	757
14	693	677	684	730	708	714	791	743	750	769	752	758
15	684	652	675	749	714	721	761	745	751	764	758	762
16	685	656	666	725	714	719	781	745	750	765	758	761
17	701	659	669	727	718	723	797	746	754	778	759	766
18	733	660	675	726	715	722	790	742	754	766	757	761
19	709	663	668	732	719	724	770	746	752	793	754	763
20	689	662	671	742	717	725	753	742	747	762	757	760
21	689	660	671	762	721	728	749	743	746	763	757	760
22	683	662	673	736	726	730	768	742	748	768	757	762
23	691	652	678	736	729	731	766	741	748	770	759	763
24	679	667	674	757	725	731	752	743	747	792	758	763
25	711	678	685	778	728	733	759	747	751	763	753	757
26	692	684	687	778	729	735	800	750	757	768	754	758
27	730	681	687	772	727	733	765	750	754	767	754	758
28	687	680	684	738	731	735	772	749	754	778	756	760
29	731	684	690	750	734	737	766	751	756	762	756	759
30	702	689	694	746	735	740	789	750	756	769	754	758
31	---	---	---	748	739	744	780	749	756	---	---	---
MONTH	779	652	695	778	695	719	800	739	750	793	747	758

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN
OCTOBER					NOVEMBER				DECEMBER				JANUARY		
1	13.0	9.8	12.0		12.8	12.4	12.5		---	---	---		---	---	---
2	12.7	10.3	11.4		12.4	12.1	12.3		---	---	---		---	---	---
3	13.3	9.8	11.9		12.2	12.1	12.2		---	---	---		---	---	---
4	13.1	9.3	12.2		---	---	---		---	---	---		---	---	---
5	12.8	9.3	11.6		---	---	---		---	---	---		---	---	---
6	14.5	10.4	12.5		---	---	---		---	---	---		---	---	---
7	14.5	12.2	14.0		---	---	---		---	---	---		---	---	---
8	13.8	10.6	13.2		---	---	---		---	---	---		---	---	---
9	14.3	9.1	12.7		---	---	---		---	---	---		---	---	---
10	14.0	10.4	13.4		---	---	---		---	---	---		---	---	---
11	13.7	8.7	12.7		---	---	---		---	---	---		---	---	---
12	13.6	10.8	13.3		---	---	---		---	---	---		---	---	---
13	13.6	9.2	12.1		---	---	---		---	---	---		---	---	---
14	13.8	8.7	12.7		---	---	---		---	---	---		---	---	---
15	13.4	9.5	12.9		---	---	---		---	---	---		---	---	---
16	13.2	12.3	12.9		---	---	---		---	---	---		---	---	---
17	13.4	12.3	12.9		---	---	---		---	---	---		---	---	---
18	13.3	12.6	13.0		---	---	---		---	---	---		---	---	---
19	13.3	12.3	12.9		---	---	---		---	---	---		---	---	---
20	13.3	9.0	12.6		---	---	---		---	---	---		---	---	---
21	13.1	12.4	12.7		---	---	---		---	---	---		---	---	---
22	13.0	11.8	12.6		---	---	---		---	---	---		---	---	---
23	13.4	12.3	12.7		---	---	---		---	---	---		---	---	---
24	12.8	12.3	12.5		---	---	---		---	---	---		---	---	---
25	12.6	11.8	12.3		---	---	---		---	---	---		---	---	---
26	12.9	12.0	12.4		---	---	---		---	---	---		---	---	---
27	12.9	12.4	12.6		---	---	---		---	---	---		---	---	---
28	12.9	12.6	12.7		---	---	---		---	---	---		---	---	---
29	12.9	12.4	12.6		---	---	---		---	---	---		---	---	---
30	12.8	12.1	12.6		---	---	---		---	---	---		---	---	---
31	12.8	12.2	12.5		---	---	---		---	---	---		---	---	---
MONTH	14.5	8.7	12.6		---	---	---		---	---	---		---	---	---
FEBRUARY					MARCH				APRIL				MAY		
1	---	---	---		---	---	---		---	---	---		---	---	---
2	---	---	---		---	---	---		---	---	---		---	---	---
3	---	---	---		---	---	---		---	---	---		---	---	---
4	---	---	---		---	---	---		---	---	---		---	---	---
5	---	---	---		---	---	---		---	---	---		---	---	---
6	---	---	---		---	---	---		---	---	---		---	---	---
7	---	---	---		---	---	---		---	---	---		---	---	---
8	---	---	---		---	---	---		---	---	---		---	---	---
9	---	---	---		---	---	---		---	---	---		---	---	---
10	---	---	---		---	---	---		---	---	---		---	---	---
11	---	---	---		---	---	---		---	---	---		---	---	---
12	---	---	---		---	---	---		---	---	---		---	---	---
13	---	---	---		---	---	---		---	---	---		7.9	6.5	7.1
14	---	---	---		---	---	---		---	---	---		7.8	6.9	7.3
15	---	---	---		---	---	---		---	---	---		7.6	6.7	7.4
16	---	---	---		---	---	---		---	---	---		8.3	6.9	7.4
17	---	---	---		---	---	---		---	---	---		8.1	6.8	7.5
18	---	---	---		---	---	---		---	---	---		7.6	6.9	7.3
19	---	---	---		---	---	---		---	---	---		8.8	6.4	7.4
20	---	---	---		---	---	---		---	---	---		7.7	7.0	7.4
21	---	---	---		---	---	---		---	---	---		8.2	6.6	7.4
22	---	---	---		---	---	---		---	---	---		7.3	7.3	8.2
23	---	---	---		---	---	---		---	---	---		8.5	7.9	8.3
24	---	---	---		---	---	---		---	---	---		8.2	7.4	7.9
25	---	---	---		---	---	---		---	---	---		8.3	7.4	7.8
26	---	---	---		---	---	---		---	---	---		9.1	7.5	8.2
27	---	---	---		---	---	---		---	---	---		8.9	7.2	8.0
28	---	---	---		---	---	---		---	---	---		9.2	7.2	8.2
29	---	---	---		---	---	---		---	---	---		8.5	7.8	8.1
30	---	---	---		---	---	---		---	---	---		8.0	7.7	7.9
31	---	---	---		---	---	---		---	---	---		8.1	7.5	7.9
MONTH	---	---	---		---	---	---		---	---	---		---	---	---

## GREEN RIVER BASIN

09234500 GREEN RIVER NEAR GREENDALE, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.6	7.5	8.1	12.5	11.2	11.7	12.3	11.5	11.9	12.9	11.8	12.4
2	8.5	7.5	8.0	12.7	11.1	11.8	12.3	11.5	11.9	12.6	11.4	11.9
3	8.7	7.9	8.2	12.9	11.7	12.3	12.4	11.3	11.8	12.7	10.7	11.7
4	8.5	7.3	7.8	12.5	11.8	12.1	11.5	11.0	11.3	13.2	11.8	12.6
5	8.4	6.9	8.0	12.5	11.5	11.9	12.2	11.1	11.7	13.0	12.0	12.5
6	9.4	7.4	8.3	12.8	11.7	12.2	12.6	11.6	12.2	12.9	11.6	12.2
7	9.4	8.1	8.6	12.8	11.7	12.1	12.5	11.6	12.0	12.5	11.4	11.8
8	9.6	8.9	9.3	13.1	11.6	12.2	12.5	11.8	12.2	12.5	11.2	11.9
9	9.4	8.5	9.0	13.3	11.8	12.5	12.3	10.9	11.9	12.7	11.7	12.1
10	8.9	7.8	8.4	13.2	12.3	12.8	11.9	11.3	11.6	12.9	11.7	12.4
11	9.2	8.0	8.6	13.6	12.5	13.0	12.1	10.8	11.6	13.1	12.1	12.7
12	9.6	8.3	9.1	13.5	12.6	12.9	11.7	10.9	11.3	13.1	12.4	12.8
13	9.4	8.6	9.1	13.5	12.6	13.0	12.1	11.2	11.6	12.9	12.2	12.6
14	9.4	8.7	9.2	13.4	12.5	13.0	12.2	11.2	11.8	13.1	12.5	12.8
15	10.4	9.0	9.6	13.3	12.6	12.9	12.1	10.8	11.4	13.6	12.6	12.9
16	10.8	9.8	10.3	13.4	12.4	12.9	12.1	11.5	11.8	13.0	12.4	12.7
17	10.8	9.9	10.3	12.8	12.1	12.5	11.9	11.3	11.7	12.7	12.2	12.3
18	10.5	9.9	10.2	12.9	12.0	12.5	12.2	11.2	11.6	12.6	12.0	12.2
19	10.6	8.5	10.3	12.9	12.2	12.6	12.9	11.1	12.0	12.5	11.9	12.2
20	10.6	9.7	10.3	13.3	12.5	12.9	13.4	12.2	12.9	12.2	11.6	11.8
21	11.1	10.1	10.5	12.8	12.3	12.6	13.6	12.7	13.2	12.4	11.7	12.0
22	11.3	9.7	10.8	12.5	11.8	12.2	13.9	12.9	13.3	12.5	11.4	11.8
23	13.2	10.0	11.2	12.0	11.7	11.9	13.6	12.4	13.0	11.9	11.2	11.6
24	12.5	11.4	12.0	12.5	11.6	12.1	13.4	12.2	12.9	12.1	11.3	11.8
25	12.4	11.2	11.8	12.5	11.9	12.2	13.2	12.0	12.8	12.5	11.6	12.1
26	12.1	11.1	11.6	12.6	12.1	12.3	12.7	11.4	12.2	12.5	12.0	12.2
27	12.2	11.3	11.7	12.7	12.1	12.4	12.8	11.8	12.3	12.1	11.6	11.9
28	12.6	9.9	11.6	12.6	12.0	12.3	12.9	11.7	12.3	12.2	11.4	11.9
29	13.1	12.1	12.5	12.6	12.1	12.4	13.0	11.7	12.4	12.5	11.8	12.1
30	12.8	11.8	12.3	12.6	11.7	12.2	13.2	11.9	12.6	12.6	11.5	12.1
31	---	---	---	12.3	11.6	11.9	12.6	11.8	12.2	---	---	---
MONTH	13.2	6.9	9.9	13.6	11.1	12.4	13.9	10.8	12.1	13.6	10.7	12.2

## GREEN RIVER BASIN

61

09235600 POT CREEK ABOVE DIVERSIONS, NEAR VERNAL, UT

LOCATION.--Lat 40°46'05", long 109°19'06", in NW¼, NE¼, NE¼, sec. 3, T. 1 S., R. 23 E., Uintah County, Hydrologic Unit 14040106, on left bank 0.3 mi upstream from Matt Warner Reservoir, and 27 mi northeast of Vernal.

DRAINAGE AREA.--24.6 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1957 to September 1993 (discontinued).

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,550 ft above sea level, from topographic map. Prior to Aug. 26, 1965, at site 0.2 mi downstream at different datum. Prior to July 28, 1978 datum of gage 1.20 ft higher at same site.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 286 ft<sup>3</sup>/s May 10, 1973, gage height, 3.55 ft; maximum gage height recorded, 5.29 ft Apr. 3, 1985 (backwater from ice); no flow at times, most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Apr. 27	2000	40	3.41	May 20	0200	*45	*3.52
May 7	2100	37	3.32				

Minimum daily discharge, 0.10 ft<sup>3</sup>/s Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.31	e.22	e.15	e.14	e.16	e.25	22	15	.73	.21	.21
2	.14	.37	e.22	e.17	e.15	e.16	e.25	20	13	.68	.18	.20
3	.12	.33	e.20	e.13	e.16	e.16	e.25	21	18	.67	.17	.18
4	.12	.34	e.19	e.11	e.15	e.16	e.25	26	22	.79	.23	.17
5	.13	.29	e.19	e.10	e.14	e.17	e.25	25	17	1.3	.34	.21
6	.15	.41	e.19	e.11	e.13	e.17	e.25	28	11	.95	.36	.24
7	.20	.33	e.20	e.14	e.15	e.17	e.25	33	10	.67	.34	.26
8	.22	.31	e.20	e.19	e.17	e.18	e.25	26	9.1	.58	.34	.25
9	.21	.27	e.20	e.22	e.19	e.18	e.25	24	7.6	.53	.33	.21
10	.19	.25	e.22	e.22	e.22	e.19	e.26	22	6.6	.51	.28	.19
11	.20	.23	e.22	e.16	e.24	e.22	e.27	23	5.6	.47	.28	.16
12	.19	.18	e.24	e.13	e.24	e.20	e.29	27	4.9	.50	.27	.13
13	.18	.36	e.23	e.14	e.21	e.19	e.31	32	4.1	.49	.22	.16
14	.17	.29	e.20	e.16	e.21	e.18	e.35	37	3.6	.46	.17	.20
15	.16	.26	e.21	e.14	e.18	e.19	e.40	42	3.1	.41	.16	.21
16	.14	.25	e.20	e.21	e.15	e.20	e.60	43	2.7	.38	.15	.20
17	.17	.26	e.19	e.23	e.17	e.23	e.90	42	2.8	.37	.13	.42
18	.18	.27	e.18	e.23	e.18	e.23	e.1.2	42	3.1	.35	.12	.39
19	.19	.30	e.18	e.22	e.17	e.24	e.1.9	41	2.6	.35	.14	.36
20	.19	.24	e.17	e.22	e.21	e.24	e2.5	43	2.2	.32	.18	.31
21	.19	e.24	e.16	e.23	e.18	e.24	e3.5	41	1.9	.29	.26	.27
22	.20	e.23	e.16	e.22	e.17	e.24	e5.2	41	1.8	.29	.25	.26
23	.20	e.22	e.17	e.20	e.18	e.24	e7.2	38	1.7	.39	.23	.26
24	.21	e.22	e.16	e.18	e.20	e.25	13	37	1.5	.90	.18	.26
25	.25	e.21	e.15	e.16	e.17	e.25	19	35	1.3	.75	.14	.26
26	.28	e.20	e.15	e.15	e.16	e.25	24	30	1.2	.49	.16	.26
27	.24	e.19	e.14	e.13	e.18	e.25	35	28	1.0	.46	.82	.26
28	.25	e.22	e.17	e.12	e.17	e.25	32	28	.90	.39	.36	.26
29	.27	e.20	e.16	e.12	---	e.25	28	24	.80	.31	.24	.26
30	.39	e.20	e.16	e.13	---	e.25	26	21	.77	.28	.22	.25
31	.52	---	e.13	e.12	---	e.25	---	18	---	.26	.21	---
TOTAL	6.38	7.98	5.76	5.14	4.97	6.54	204.13	960	176.87	16.32	7.67	7.26
MEAN	.21	.27	.19	.17	.18	.21	6.80	31.0	5.90	.53	.25	.24
MAX	.52	.41	.24	.23	.24	.25	.35	.43	.22	1.3	.82	.42
MIN	.12	.18	.13	.10	.13	.16	.25	.18	.77	.26	.12	.13
AC-FT	13	16	11	10	9.9	13	405	1900	351	32	15	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1993, BY WATER YEAR (WY)

	1958	1959	1958	1958	1958	1958	1958	1958	1958	1958	1958	1958
MEAN	.40	.42	.20	.11	.17	1.22	13.3	21.2	7.32	.50	.19	.20
MAX	2.32	2.48	1.51	1.34	1.83	11.4	69.5	88.9	55.5	3.30	1.45	1.17
(WY)	1987	1985	1984	1984	1984	1972	1962	1973	1983	1983	1984	1984
MIN	.000	.000	.000	.000	.000	.000	.10	.92	.090	.000	.000	.000
(WY)	1958	1959	1958	1958	1958	1958	1968	1977	1977	1958	1958	1958

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1958 - 1993
ANNUAL TOTAL	1022.75	1409.02	
ANNUAL MEAN	2.79	3.86	
HIGHEST ANNUAL MEAN			3.78
LOWEST ANNUAL MEAN			13.7
HIGHEST DAILY MEAN	31	43	.29
LOWEST DAILY MEAN	.00	.10	188
ANNUAL SEVEN-DAY MINIMUM	.04	.13	.00
ANNUAL RUNOFF (AC-FT)	2030	2790	.00
10 PERCENT EXCEEDS	11	19	2740
50 PERCENT EXCEEDS	.28	.24	10
90 PERCENT EXCEEDS	.11	.15	.17

e Estimated



09261000 GREEN RIVER NEAR JENSEN, UT

LOCATION.--Lat 40°24'34", long 109°14'05", in NE1/4SW1/4SE1/4, sec. 5, T. 5 S., R. 24 E., Uintah County, Hydrologic Unit 14060001, Dinosaur National Monument, on right bank 300 ft upstream from highway bridge, 1 mi downstream from Cub Creek and Chew Ranch, 4 mi southeast of Dinosaur National Monument headquarters, 6.5 mi northeast of Jensen, 12 mi upstream from Brush Creek, and 313.9 mi from mouth.

DRAINAGE AREA.--29,660 mi<sup>2</sup>, approximately, including about 4,260 mi<sup>2</sup>, which probably is noncontributing. This noncontributing area includes 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1903 to December 1904, June to August 1905 (gage heights only), March to September 1906, July to October 1914, August to December 1915, October 1946 to current year. Prior to October 1946, published as "at Jensen," except October to December 1903, which was published as "near Vernal."

REVISED RECORDS.--WSP 1243: 1904 (m). WRD UT-73: 1972. WDR UT-76-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,758 ft above sea level, from river-profile map. Prior to Oct. 1, 1946, nonrecording gages at site 15 mi downstream at different datums. Dec. 13, 1946 to Sept. 30, 1948, water-stage recorder at present site at datum 1.50 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transbasin diversions and diversions for irrigation above station. Flow regulated by Flaming Gorge Reservoir (see station 09234400) 93.1 mi upstream beginning Nov. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,000 ft<sup>3</sup>/s May 18, 1984; gage height, 14.66 ft; minimum observed, 102 ft<sup>3</sup>/s Dec. 6, 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,400 ft<sup>3</sup>/s May 29, gage height, 9.55 ft; minimum daily discharge, 1,100 ft<sup>3</sup>/s Oct. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1160	1440	1200	e1200	e1460	1480	4300	6530	18100	7310	1940	1640
2	1160	1460	1200	e1400	e1560	1480	3760	6560	18000	7280	1850	1630
3	1160	1480	1280	e1360	e1600	1520	3480	6040	18700	e6450	1800	1650
4	1140	1570	1240	e1270	e1520	1510	3370	5690	18600	e6350	1750	1660
5	1140	1570	1220	e1120	e1500	1520	3490	6270	18900	e6250	1710	1680
6	1120	1600	1300	e1180	e1450	1540	3280	7570	16900	5420	1650	1640
7	1110	1440	1330	e1210	e1450	1580	3610	9330	14900	4830	1610	1650
8	1100	1510	1390	e1500	e1500	1590	4480	8370	14700	4330	1680	1610
9	1110	1450	1420	e1300	e1580	1650	4190	7240	14700	4000	1760	1680
10	1120	1530	1440	e1280	e1700	1740	3470	6920	13700	3890	1750	1670
11	1140	1520	1420	e1200	e1750	1800	3250	6220	14000	3930	1720	1700
12	1170	1500	1500	e1180	e1750	1800	3290	5850	12700	3750	1750	1650
13	1160	1470	1450	e1260	e1700	1780	3370	7130	12500	3700	1650	1660
14	1180	1430	1370	e1390	e1730	1830	3280	9890	13100	3690	1580	1660
15	1160	1440	1460	e1400	e1700	1830	3200	12900	14100	3590	1690	1620
16	1160	1460	1390	e1400	e1660	2160	3100	15700	13900	3470	1610	1620
17	1190	1540	1350	e1500	e1660	2240	3010	18600	14300	3320	1610	1630
18	1190	1560	1480	e1560	e1700	2640	3120	19300	15100	3110	1530	1660
19	1180	1550	e1360	e1550	e1800	3100	3170	19000	15200	2940	1630	1720
20	1180	1520	e1300	e1540	e1820	3940	3330	18000	14200	2760	1670	1750
21	1190	1490	e1310	e1530	e1860	3880	3650	17600	12300	2530	1650	1770
22	1190	1450	e1420	e1500	1860	3490	3780	19700	11600	2330	1750	1820
23	1190	1480	e1310	e1480	1820	3300	3550	19700	10900	2220	1770	1870
24	1220	1400	e1300	e1460	1770	3250	3360	19500	10400	2230	1560	1800
25	1380	1190	e1250	e1420	1700	3310	3530	18200	9500	2230	1660	1790
26	1240	1160	e1200	e1390	1560	3320	4350	16500	7980	2150	1720	1770
27	1250	1130	e1200	e1340	1530	3390	4160	17100	7280	2240	1710	1710
28	1250	1180	e1330	e1310	1490	3880	4450	20000	7150	2490	1700	1560
29	1250	1240	e1300	e1350	---	4290	5400	19900	7340	2310	1670	1700
30	1290	1230	e1210	e1380	---	4330	7190	19500	7400	2190	1670	1670
31	1390	---	e1160	e1440	---	4190	---	19100	---	2050	1660	---
TOTAL	36870	42990	41090	42150	46280	79360	112970	410320	397850	115330	52460	50640
MEAN	1189	1433	1325	1360	1653	2560	3766	13240	13260	3720	1692	1688
MAX	1390	1600	1500	1560	1860	4330	7190	20000	18900	7310	1940	1870
MIN	1100	1130	1160	1120	1450	1480	3010	5690	7150	2050	1530	1560
AC-FT	73130	85270	81500	83600	91800	157400	224100	813900	789100	228800	104100	100400

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1993, BY WATER YEAR (WY)

MEAN	2129	2161	2122	2101	2326	2973	5632	11250	11580	4825	2523	1916
MAX	5022	4833	4414	4844	4839	5765	15360	24110	26440	16110	6463	4159
(WY)	1983	1987	1987	1985	1986	1986	1962	1984	1957	1983	1983	1983
MIN	346	593	528	598	721	949	2029	4220	3129	498	453	505
(WY)	1964	1963	1963	1955	1955	1963	1963	1990	1992	1963	1963	1963

## SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

## WATER YEARS 1947 - 1993

ANNUAL TOTAL	897670		1428310				
ANNUAL MEAN	2453		3913			4298	
HIGHEST ANNUAL MEAN						7784	1984
LOWEST ANNUAL MEAN						1458	1963
HIGHEST DAILY MEAN	9530	May 12	20000	May 28	38500	May 18	1984
LOWEST DAILY MEAN	1100	Oct 8	1100	Oct 8	260	Aug 2	1963
ANNUAL SEVEN-DAY MINIMUM	1120	Oct 4	1120	Oct 4	276	Jul 29	1963
ANNUAL RUNOFF (AC-FT)	1781000		2833000		3114000		
10 PERCENT EXCEEDS	4540		12600		10500		
50 PERCENT EXCEEDS	1830		1700		2700		
90 PERCENT EXCEEDS	1220		1200		1040		

e Estimated

WATER-QUALITY RECORDS

WATER TEMPERATURES: Maximum daily, 27.0°C several days during July and August; minimum daily, 0.0°C many days during winter period.

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)
OCT 08... 1992	1130	1180	730	8.6	11.5	9.5	10.2	642	230	56
NOV 04...	1030	1610	720	8.4	8.5	7.0	--	--	--	--
DEC 10... 1993	1500	1470	750	8.6	5.5	1.0	--	--	--	--
MAR 25...	1300	3130	685	8.4	22.0	8.0	--	--	--	--
APR 15...	1200	3130	685	8.6	18.0	10.0	--	--	--	--
MAY 11...	1900	6090	445	8.4	25.0	17.0	--	--	--	--
JUL 14...	1200	3650	350	8.3	25.0	21.0	--	--	--	--
AUG 19...	1230	1700	660	--	31.0	25.0	--	--	--	--
SEP 16...	1230	1550	740	8.7	29.0	14.0	--	--	--	--

[illegible]

## GREEN RIVER BASIN

09261000 GREEN RIVER NEAR JENSEN, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT, 1992 08...	433	0.61	1440	--	<0.010	<0.050	0.040	0.05	<0.010
NOV 04...	--	--	--	--	--	--	--	--	--
DEC 10...	--	--	--	0.060	<0.010	0.060	<0.010	--	<0.010
MAR, 1993 25...	--	--	--	--	--	--	--	--	--
APR 15...	--	--	--	--	--	--	--	--	--
MAY 11...	--	--	--	--	--	--	--	--	--
JUL 14...	--	--	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--	--	--
SEP 16...	--	--	--	--	--	--	--	--	--

DATE	TIME	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	BORON, DIS- SOLVED (UG/L AS B)
OCT, 1992 08...	1130	<1	100
NOV 04...	1030	<1	--
DEC 10...	1500	<1	--
MAR, 1993 25...	1300	2	--
APR 15...	1200	2	--
MAY 11...	1900	1	--
JUL 14...	1200	<1	--
AUG 19...	1230	<1	--
SEP 16...	1230	1	--

## GREEN RIVER BASIN

65

09261000 GREEN RIVER NEAR JENSEN, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	730	---	760	760	---	---	520	560	325	250	---	810
2	720	710	750	780	---	---	580	---	315	255	580	800
3	720	720	760	---	---	---	590	560	300	255	580	810
4	---	720	760	780	---	---	---	325	245	---	590	800
5	720	760	760	760	---	---	520	310	250	255	590	---
6	720	750	---	780	---	---	560	325	---	---	580	810
7	720	740	760	750	---	---	490	315	250	550	590	820
8	730	---	760	---	---	670	570	305	250	550	---	800
9	720	730	760	---	---	670	530	---	245	550	580	810
10	720	760	760	---	---	670	530	315	245	540	580	810
11	---	740	780	---	---	660	---	315	245	---	580	810
12	720	730	780	---	---	670	540	315	250	550	590	---
13	720	760	---	---	---	660	520	315	---	550	810	800
14	720	750	750	---	---	---	590	315	250	550	810	820
15	720	---	780	---	---	640	590	315	250	550	---	810
16	720	760	750	---	---	670	510	---	250	540	810	810
17	720	750	780	---	---	670	630	320	250	550	810	820
18	---	760	760	---	---	630	---	320	265	---	800	800
19	720	760	760	---	---	680	560	325	255	560	790	---
20	720	750	---	---	---	670	630	315	---	570	800	820
21	720	750	780	---	---	---	560	330	255	580	810	820
22	730	---	760	---	---	660	570	330	260	570	---	820
23	720	760	780	---	---	680	620	---	250	570	800	800
24	710	750	780	---	---	690	560	320	255	580	810	820
25	---	780	780	---	---	640	---	325	265	---	790	820
26	730	760	780	---	---	670	560	330	250	580	780	---
27	720	760	---	---	---	680	560	325	---	580	800	820
28	720	760	760	---	---	---	610	325	250	570	800	820
29	710	---	780	---	---	680	560	315	250	580	---	800
30	710	760	760	---	---	670	560	---	255	570	820	800
31	710	---	760	---	---	670	---	285	---	570	810	---
MEAN	720	749	766	768	---	667	562	333	259	514	719	811

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	---	2.0	.0	---	---	3.5	13.5	18.0	21.5	---	23.0
2	15.0	12.0	2.5	.0	---	---	4.0	---	18.5	21.5	26.5	22.5
3	14.5	12.0	2.0	---	---	---	4.5	13.5	18.5	21.0	26.0	22.5
4	---	12.0	1.5	.0	---	---	---	14.0	19.0	---	26.5	22.0
5	14.0	11.0	1.5	.0	---	---	5.5	16.0	19.0	22.0	27.0	---
6	14.0	11.0	---	.0	---	---	6.0	14.5	---	21.5	27.0	21.5
7	14.0	10.5	2.0	.0	---	---	6.5	14.5	19.0	22.0	26.5	21.0
8	14.5	---	1.5	.0	---	.0	6.5	15.0	19.5	22.5	---	20.5
9	14.5	9.0	1.5	.0	---	.0	7.0	---	19.5	22.5	26.0	20.5
10	14.0	9.0	1.0	---	---	.5	7.5	15.0	19.5	23.0	26.5	20.0
11	---	8.5	1.0	.0	---	.5	---	15.5	20.0	---	26.5	19.0
12	14.0	8.5	.0	.0	---	.5	8.5	15.5	20.0	24.0	27.0	---
13	13.5	8.0	---	.0	---	1.0	8.5	15.5	---	24.0	27.0	18.5
14	13.5	7.5	.0	---	---	---	9.0	16.0	20.5	24.5	26.5	18.5
15	14.0	---	.0	---	---	1.0	9.0	15.5	21.0	24.5	---	18.0
16	14.5	7.0	.0	---	---	1.0	9.5	---	20.5	24.5	26.5	18.0
17	14.5	7.0	.0	---	---	1.5	9.5	16.0	20.5	25.0	26.0	17.5
18	---	6.0	.0	---	---	1.5	---	16.0	21.0	---	26.5	17.0
19	14.0	6.0	.0	---	---	1.5	10.0	16.5	21.5	25.0	27.0	---
20	14.0	5.5	---	---	---	2.0	10.0	16.5	---	25.5	26.5	17.0
21	13.5	5.0	.0	---	---	---	10.5	16.0	22.0	25.5	26.0	17.0
22	13.5	---	.0	---	---	2.0	11.0	16.5	22.0	25.0	---	16.5
23	13.0	4.5	.0	---	---	2.0	11.0	---	22.5	25.0	26.0	16.5
24	13.0	4.0	.0	---	---	2.5	11.5	17.0	22.5	26.0	25.5	17.0
25	---	4.0	.0	---	---	2.5	---	17.0	22.0	---	25.0	17.0
26	12.5	3.5	.0	---	---	2.5	12.0	17.5	22.5	26.0	25.0	---
27	12.5	3.5	---	---	---	3.0	12.0	17.5	---	26.5	25.5	16.5
28	12.0	3.0	.0	---	---	---	12.5	17.5	22.0	26.5	25.0	16.0
29	12.5	---	.0	---	---	3.0	12.5	17.5	21.5	26.0	---	16.0
30	12.0	2.0	.0	---	---	3.0	13.0	---	21.0	26.5	25.0	15.5
31	12.5	---	.0	---	---	3.0	---	18.0	---	27.0	24.5	---
MEAN	13.6	7.2	.6	.0	---	1.6	8.9	15.9	20.5	24.2	26.1	18.7

## GREEN RIVER BASIN

09261700 BIG BRUSH CREEK ABOVE RED FLEET RESERVOIR, NEAR VERNAL, UT

LOCATION.--Lat 40°35'20", long 109°27'53", in NW¼,SE¼,NE¼, sec. 5, T. 3 S., R. 22 E., Uintah County, Hydrologic Unit 14060002, on right bank 950 ft below State Highway 44, 5.5 mi upstream from Little Brush Creek, and 10.5 mi northeast of Vernal.

DRAINAGE AREA.--77.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,625 ft above sea level, from topographic map. Prior to September 1980, water-stage recorder at site 250 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Water from Oaks Park Reservoir (capacity 6,250 acre-ft), near headwaters, is diverted through Oaks Park Canal to Ashley Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 375 ft<sup>3</sup>/s June 2, 1983, gage height, 2.40 ft; maximum gage height, 3.06 ft May 23, 1980 at different datum; minimum daily, 7.6 ft<sup>3</sup>/s Feb. 10, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 284 ft<sup>3</sup>/s May 26, gage height, 2.01 ft; minimum daily discharge, 9.0 ft<sup>3</sup>/s Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	e10	e10	10	9.9	18	78	254	35	55	24
2	14	15	e11	11	10	9.9	21	72	254	34	54	25
3	15	14	e11	e11	10	9.9	22	72	254	33	55	25
4	14	14	e10	e9.5	11	11	22	111	255	32	54	25
5	14	14	e10	e9.0	e10	10	23	107	254	32	53	24
6	13	15	e10	e9.5	e11	11	23	88	247	32	53	24
7	13	16	e10	e10	11	10	23	81	238	32	51	23
8	12	14	e10	11	11	10	22	68	217	32	49	23
9	13	14	e11	12	12	10	21	62	195	32	48	22
10	13	14	e11	11	11	11	22	61	171	31	45	23
11	13	13	e11	11	11	11	23	89	156	30	42	24
12	13	13	e10	e9.5	11	11	23	137	146	29	38	21
13	13	13	e10	e9.5	e11	11	23	173	134	29	35	21
14	12	13	e10	e10	e11	11	22	187	123	27	34	21
15	13	13	e11	e10	e11	11	22	227	117	27	34	21
16	13	13	e10	e10	e10	11	23	242	113	27	32	21
17	14	13	e10	10	e12	11	21	237	109	27	30	24
18	14	13	e10	10	e11	11	21	245	119	26	29	24
19	13	13	e11	10	e11	11	20	243	102	26	28	25
20	13	13	e11	10	e10	12	21	239	87	26	30	23
21	13	e12	e10	9.9	e10	11	21	247	76	25	33	22
22	13	e12	e10	e10	e11	11	22	262	71	26	30	22
23	13	e12	e11	e10	10	11	30	261	68	27	28	22
24	14	e11	e10	e10	10	12	36	258	61	30	26	22
25	13	e10	e10	e10	e10	12	36	261	55	34	25	22
26	13	e10	e10	e10	e9.4	14	36	265	50	36	26	22
27	14	e11	e10	e9.5	e10	15	42	261	47	34	30	22
28	15	e10	e10	e9.5	e10	17	59	259	43	29	29	21
29	14	e10	e9.5	e9.5	---	18	76	250	39	28	26	21
30	16	e10	e9.5	e9.5	---	18	87	251	37	27	25	21
31	15	---	e9.5	e10	---	18	---	256	---	55	25	---
TOTAL	419	382	317.5	311.9	296.4	370.7	881	5650	4092	960	1152	680
MEAN	13.5	12.7	10.2	10.1	10.6	12.0	29.4	182	136	31.0	37.2	22.7
MAX	16	16	11	12	12	18	87	265	255	55	55	25
MIN	12	10	9.5	9.0	9.4	9.9	18	61	37	25	25	21
AC-FT	831	758	630	619	588	735	1750	11210	8120	1900	2280	1350

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1993, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	21.6	18.2	15.9	14.9	14.3	15.3	47.0	144	113	46.7	34.2	24.7		
MAX	38.2	29.3	25.4	22.4	21.4	24.4	88.9	209	314	126	51.2	32.6		
(WY)	1987	1987	1984	1984	1987	1986	1985	1985	1983	1983	1983	1986		
MIN	13.5	12.4	10.2	10.1	10.6	10.8	17.7	50.8	26.8	25.9	20.3	15.7		
(WY)	1990	1991	1993	1993	1993	1982	1982	1989	1989	1989	1989	1989		

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1980 - 1993

ANNUAL TOTAL	12314.9	15512.5		
ANNUAL MEAN	33.6	42.5		
HIGHEST ANNUAL MEAN			42.5	
LOWEST ANNUAL MEAN			64.5	1983
HIGHEST DAILY MEAN	195	May 2	23.6	1989
LOWEST DAILY MEAN	7.6	Feb 10	33.6	Jun 24 1983
ANNUAL SEVEN-DAY MINIMUM	8.8	Feb 7	7.6	Feb 10 1992
ANNUAL RUNOFF (AC-FT)	24430	30770	8.8	Feb 7 1992
10 PERCENT EXCEEDS	94	115		
50 PERCENT EXCEEDS	14	18		
90 PERCENT EXCEEDS	10	10		

e Estimated

## GREEN RIVER BASIN

67

09266500 ASHLEY CREEK NEAR VERNAL, UT

LOCATION.--Lat 40°34'39", long 109°37'17", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 12, T. 3 S., R. 20 E., Uintah County, Hydrologic Unit 14060002, on right bank 0.8 mi upstream from head of Utah Power & Light Co.'s canal, 4.5 mi upstream from Dry Fork, and 10 mi northwest of Vernal.

DRAINAGE AREA.--101 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1911 to April 1912, August to December 1912, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 6,230.61 ft above sea level. Prior to Nov. 14, 1917, nonrecording and water-stage recorder at several sites within 1.5 mi of present site at various datums. Nov. 14, 1917 to July 30, 1968, water-stage recorder at site 75 ft downstream at various datums.

REMARKS.--No estimated daily discharges. Records fair. Flow increased since July 1940 by water released from Oaks Park Reservoir, capacity, 6,250 acre-ft on Big Brush Creek and diverted to Ashley Creek basin for irrigation. City of Vernal pipeline, capacity, approximately 11 ft<sup>3</sup>/s, diverts water from tributary spring about 1,000 ft above station (diversion began Aug. 1, 1941); at times, part of this flow is returned to Ashley Creek 2.5 mi below station. Prior to September 1961, pipeline capacity was approximately 5 ft<sup>3</sup>/s and the return flow entered Ashley Creek 0.5 mi below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,500 ft<sup>3</sup>/s June 11, 1965, gage height, 4.42 ft, datum then in use from rating table extended above 1,060 ft<sup>3</sup>/s; maximum gage height, 6.09 ft June 16, 1929, datum then in use; minimum, 3.2 ft<sup>3</sup>/s Mar. 16, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	2100	*2,530	*4.93	No other peak greater than base discharge.			

Minimum daily discharge, 4.9 ft<sup>3</sup>/s, Mar. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	20	13	8.4	6.0	5.7	7.1	70	716	132	82	48
2	39	17	13	8.7	5.2	5.7	8.2	73	577	127	80	48
3	40	17	14	8.4	5.8	5.1	7.2	76	547	129	84	47
4	38	14	13	7.9	5.9	5.7	7.9	114	443	128	86	47
5	36	15	12	8.3	6.2	5.4	8.4	117	408	130	92	45
6	37	17	12	8.8	6.5	5.5	8.3	108	387	125	90	45
7	39	16	13	8.7	6.1	5.3	7.5	98	318	123	84	44
8	39	15	12	8.0	6.6	5.1	7.8	88	277	101	86	43
9	39	16	11	8.1	6.2	5.7	8.6	84	262	94	94	42
10	38	13	12	8.5	6.5	5.4	8.3	82	252	89	87	39
11	37	13	12	7.4	5.8	5.6	8.9	116	274	86	81	37
12	36	15	12	7.2	5.8	5.6	8.0	209	290	84	66	37
13	35	18	11	7.7	5.9	4.9	8.3	353	271	104	57	37
14	35	18	10	8.5	5.6	5.7	8.0	480	266	106	54	36
15	34	17	12	7.6	5.7	5.1	8.2	606	277	124	62	35
16	32	17	10	7.7	5.6	5.6	8.4	800	275	121	59	35
17	40	16	10	7.3	5.5	5.2	8.0	887	283	118	55	39
18	41	16	10	7.3	5.6	6.2	8.5	898	260	116	54	41
19	40	16	9.9	7.8	6.0	5.4	8.4	861	236	114	58	44
20	41	16	9.2	7.1	5.8	5.9	8.8	940	225	105	65	43
21	42	15	9.4	6.8	6.2	5.3	7.7	1220	225	105	71	40
22	42	12	9.9	6.9	5.4	6.0	9.4	1350	220	116	64	37
23	42	15	8.5	7.0	5.7	5.5	13	1190	200	115	59	36
24	41	15	8.5	6.6	5.8	6.2	15	1150	183	152	54	35
25	42	12	9.0	6.7	5.6	6.7	17	1440	170	113	55	35
26	42	13	8.0	6.7	5.9	7.2	16	1410	159	110	54	34
27	40	14	8.0	6.7	5.4	8.3	24	1340	155	102	53	34
28	39	15	8.1	6.5	6.0	8.2	34	1240	146	94	51	34
29	32	13	9.4	6.6	---	7.9	48	936	143	89	49	33
30	24	15	8.5	6.5	---	7.9	67	793	136	88	46	32
31	23	---	8.3	6.2	---	6.1	---	776	---	83	45	---
TOTAL	1164	461	326.7	232.6	164.3	185.1	413.9	19905	8581	3423	2077	1182
MEAN	37.5	15.4	10.5	7.50	5.87	5.97	13.8	642	286	110	67.0	39.4
MAX	42	20	14	8.8	6.6	8.3	67	1440	716	152	94	48
MIN	23	12	8.0	6.2	5.2	4.9	7.1	70	136	83	45	32
AC-FT	2310	914	648	461	326	367	821	39480	17020	6790	4120	2340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1993, BY WATER YEAR (WY)

	MEAN	52.6	37.6	28.3	23.8	21.1	20.0	47.8	340	318	126	84.0	66.9
MAX	154	104	64.2	45.0	40.0	36.2	162	739	1051	360	161	230	
(WY)	1942	1942	1942	1928	1928	1922	1962	1986	1983	1975	1952	1927	
MIN	6.91	5.57	7.74	5.12	4.60	4.54	6.22	71.7	59.1	39.2	16.0	7.81	
(WY)	1990	1990	1989	1977	1978	1978	1975	1977	1934	1977	1989	1989	

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1920 - 1993

ANNUAL TOTAL	25226.3	38115.6	
ANNUAL MEAN	68.9	104	97.5
HIGHEST ANNUAL MEAN			178
LOWEST ANNUAL MEAN			31.5
HIGHEST DAILY MEAN	569	1440	1970
LOWEST DAILY MEAN	5.7	4.9	3.5
ANNUAL SEVEN-DAY MINIMUM	5.9	5.4	3.8
ANNUAL RUNOFF (AC-FT)	50040	75600	70640
10 PERCENT EXCEEDS	177	255	223
50 PERCENT EXCEEDS	38	32	42
90 PERCENT EXCEEDS	6.7	5.9	14



## GREEN RIVER BASIN

09267500 MOSBY CANAL NEAR LAPOINT, UT

LOCATION.--Lat 40°36'30", long 109°53'00", in sec. 27, T. 2 S., R. 18 E., Uintah County, Hydrologic Unit 14060002, on left bank 4.5 mi southeast of Paradise Park Reservoir, 8 mi downstream from diversion from Dry Fork, and 16 mi northwest of Lapoint.

PERIOD OF RECORD.--July 1954 to current year. Seasonal records only since October 1984.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,500 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No flow is assumed November through April. Canal began diverting in 1942 or 1943 from Dry Fork for irrigation in Deep Creek basin. Since 1975 flow regulated by Julius Park Reservoir, capacity 200 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 41 ft<sup>3</sup>/s June 5, 12, 1990; no flow for extended periods each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e.00	25	27	29	.00
2	---	---	---	---	---	---	---	e.00	24	27	29	.00
3	---	---	---	---	---	---	---	e.00	23	27	27	4.9
4	---	---	---	---	---	---	---	e.00	22	26	21	9.4
5	---	---	---	---	---	---	---	e.00	21	27	15	10
6	---	---	---	---	---	---	---	e.00	19	25	15	17
7	---	---	---	---	---	---	---	e.00	17	23	9.0	24
8	---	---	---	---	---	---	---	e.00	11	22	.03	24
9	---	---	---	---	---	---	---	e.00	.24	25	.01	24
10	---	---	---	---	---	---	---	e2.0	.09	31	.00	24
11	---	---	---	---	---	---	---	e5.0	7.2	30	.01	25
12	---	---	---	---	---	---	---	e5.0	17	29	.00	25
13	---	---	---	---	---	---	---	e5.0	18	28	.00	20
14	---	---	---	---	---	---	---	e14	18	27	5.3	7.0
15	---	---	---	---	---	---	---	e14	19	26	14	.02
16	---	---	---	---	---	---	---	e13	22	26	18	.00
17	---	---	---	---	---	---	---	e12	28	26	19	.02
18	---	---	---	---	---	---	---	e19	31	26	21	.02
19	---	---	---	---	---	---	---	e27	30	24	22	.03
20	---	---	---	---	---	---	---	e26	29	14	23	.01
21	---	---	---	---	---	---	---	e25	27	.02	22	.00
22	---	---	---	---	---	---	---	e23	25	.00	22	.00
23	---	---	---	---	---	---	---	e22	24	.01	21	.00
24	---	---	---	---	---	---	---	e20	24	.04	11	.00
25	---	---	---	---	---	---	---	e19	25	2.0	.02	.00
26	---	---	---	---	---	---	---	e27	26	23	.01	.00
27	---	---	---	---	---	---	---	e26	27	24	.00	.00
28	---	---	---	---	---	---	---	26	28	21	.00	.00
29	---	---	---	---	---	---	---	26	28	24	.00	.00
30	---	---	---	---	---	---	---	27	28	27	.00	.00
31	---	---	---	---	---	---	---	26	---	28	.00	---
TOTAL	---	---	---	---	---	---	---	409.00	643.53	665.07	343.38	214.40
MEAN	---	---	---	---	---	---	---	13.2	21.5	21.5	11.1	7.15
MAX	---	---	---	---	---	---	---	27	31	31	29	25
MIN	---	---	---	---	---	---	---	.00	.09	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	811	1280	1320	681	425

e Estimated

## GREEN RIVER BASIN

69

09271550 ASHLEY CREEK BELOW UNION CANAL DIVERSION NEAR JENSEN, UT

LOCATION.--Lat 40°21'29", long 109°23'13", in NW¼,SE¼,NE¼, sec. 25, T. 5 S., R. 22 E., Uintah County, Hydrologic Unit 14060002, on right bank about 0.5 mi below Union Canal diversion at County road bridge, 1.7 mi above mouth and 2.5 mi southwest of Jensen.

DRAINAGE AREA.--389 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,740 ft above sea level from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft<sup>3</sup>/s May 26, 1993, gage height, 5.22 ft; minimum daily discharge, 0.24 ft<sup>3</sup>/s Sept. 1, 4, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,340 ft<sup>3</sup>/s May 26, gage height, 5.22 ft; minimum daily discharge, 2.0 ft<sup>3</sup>/s Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	38	14	e17	e19	e19	57	8.9	1030	32	28	23
2	4.8	35	14	e14	e21	e19	54	7.4	835	33	26	16
3	5.7	33	13	e12	e22	e20	50	8.8	715	41	22	9.8
4	3.6	28	13	e10	e22	e19	45	10	571	43	8.5	7.5
5	3.3	27	e12	e15	e20	e19	57	18	424	51	6.5	12
6	3.8	26	e11	e16	e19	e19	70	29	418	38	8.2	12
7	6.0	26	e11	e16	e20	e20	51	28	337	32	22	13
8	9.5	26	e12	e17	e21	e22	45	23	282	29	37	13
9	9.8	26	e12	e17	e22	e25	41	22	251	16	69	13
10	10	24	e13	e17	e23	e29	38	12	224	12	71	9.3
11	9.2	22	e13	e16	e22	e26	37	10	233	17	75	8.3
12	9.2	23	e14	e12	e21	e33	36	5.3	258	18	86	8.1
13	9.6	23	e13	e13	e21	e35	37	5.1	243	18	90	6.9
14	6.2	23	e12	e14	e20	e36	34	10	226	12	86	11
15	13	23	e13	e16	e19	37	33	92	209	6.5	81	6.6
16	13	23	e13	e18	e17	76	31	206	201	8.2	79	5.9
17	13	23	e12	e18	e20	103	31	281	192	7.7	70	8.7
18	15	23	e12	e19	e21	154	30	442	213	7.3	52	11
19	11	23	e13	e19	e20	130	29	471	184	13	33	11
20	11	24	e13	e19	e20	106	28	438	173	11	21	8.5
21	9.7	22	e14	e18	e19	90	28	692	163	9.2	27	3.0
22	11	22	e14	e18	e19	73	26	1140	168	6.6	32	2.7
23	11	24	e14	e17	e20	66	26	850	177	7.6	30	2.9
24	11	23	e14	e17	e21	60	25	757	155	25	28	2.7
25	16	21	e14	e16	e21	54	25	1130	150	42	21	2.8
26	20	19	e13	e15	e19	49	24	1510	144	42	26	2.4
27	20	17	e13	e13	e19	47	24	1160	133	52	23	2.9
28	25	17	e13	e14	e20	49	23	1240	126	53	27	2.0
29	32	15	e15	e14	---	143	19	1280	99	40	27	2.2
30	36	14	e15	e16	---	103	9.4	967	77	38	19	3.0
31	51	---	e13	e18	---	70	---	973	---	37	22	---
TOTAL	412.4	713	405	491	568	1751	1063.4	13826.5	8611	798.1	1253.2	241.2
MEAN	13.3	23.8	13.1	15.8	20.3	56.5	35.4	446	287	25.7	40.4	8.04
MAX	51	38	15	19	23	154	70	1510	1030	53	90	23
MIN	3.0	14	11	10	17	19	9.4	5.1	77	6.5	6.5	2.0
AC-FT	818	1410	803	974	1130	3470	2110	27420	17080	1580	2490	478

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993
MEAN	15.4	22.9	16.8	16.5	20.0	38.9	18.9	228	146	15.8	22.8	6.88
MAX	17.5	23.8	20.5	17.1	20.3	56.5	35.4	446	287	25.7	40.4	8.04
(WY)	1992	1993	1992	1993	1993	1993	1993	1993	1993	1993	1993	1993
MIN	13.3	22.0	13.1	15.8	19.7	21.4	2.43	9.97	4.80	5.87	5.27	5.72
(WY)	1993	1992	1993	1993	1992	1992	1992	1992	1992	1992	1992	1992

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1992 - 1993

ANNUAL TOTAL	4337.42	30133.8	47.6	
ANNUAL MEAN	11.9	82.6	82.6	1993
HIGHEST ANNUAL MEAN			12.7	1992
LOWEST ANNUAL MEAN			1510	May 26 1993
HIGHEST DAILY MEAN	51	Oct 31		Jul 31 1992
LOWEST DAILY MEAN	.87	Jul 31		Jul 31 1992
ANNUAL SEVEN-DAY MINIMUM	.95	Jul 31		Jul 31 1992
ANNUAL RUNOFF (AC-FT)	8600		34470	
10 PERCENT EXCEEDS	23		54	
50 PERCENT EXCEEDS	11		17	
90 PERCENT EXCEEDS	2.2		3.0	

e Estimated

## GREEN RIVER BASIN

09271550 ASHLEY CREEK BELOW UNION CANAL DIVERSION NEAR JENSEN, UT--Continued  
WATER QUALITY RECORDS

PERIOD OF RECORD.--November 1991 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
MAR , 1993						
25...	1130	46	2260	8.3	11.0	1830
APR 21...	1030	26	2420	8.2	8.0	--
MAY 26...	0850	1200	96	8.3	6.5	--
JUN 23...	1905	179	560	8.5	18.0	--
JUL 28...	0730	71	1390	8.2	17.0	--
AUG 25...	0700	20	1800	8.1	17.0	--

DATE	TIME	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
DEC , 1992		
10...	1700	61
MAR , 1993		
25...	1130	<65
APR 21...	1030	80
MAY 26...	0850	4
JUN 23...	1905	9
JUL 28...	0730	23
AUG 25...	0700	27

## GREEN RIVER BASIN

71

09271600 STEWART LAKE OUTFLOW NEAR JENSEN, UT

LOCATION.--Lat 40°20'46", long 109°21'45", in NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 32, T. 5 S., R. 23 E., Uintah County, Hydrologic Unit 14060003, on right bank, about 2 mi southwest of Jensen.

PERIOD OF RECORD.--August 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,720 ft above sea level from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17 ft<sup>3</sup>/s May 12, 1992, gage height, 3.20 ft; minimum daily discharge, 0.15 ft<sup>3</sup>/s Apr. 30, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 11 ft<sup>3</sup>/s Mar. 29, 30; no flow many days during January, February and May.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.6	e2.0	e.88	e.16	e.00	e1.0	9.0	.97	e5.4	1.9	2.1	4.7
2	e2.5	e1.6	e.76	e.15	e.00	e1.1	8.4	.78	e7.7	1.8	2.0	4.9
3	e2.4	e1.7	e.62	e.15	e.00	e1.2	7.8	.71	e7.7	1.4	2.0	5.0
4	e2.4	e1.8	e.50	e.11	e.00	e1.3	7.1	.61	e7.4	1.4	2.1	5.3
5	e2.3	e2.0	e.43	e.00	e.00	e1.5	6.9	1.0	e5.7	1.4	2.1	6.0
6	e2.3	e2.1	e.37	e.00	e.00	e1.6	6.6	e1.3	e8.7	1.3	2.2	6.3
7	e2.4	e2.1	e.35	e.00	e.00	e1.7	6.0	.00	e9.1	1.3	2.2	6.7
8	e6.0	e2.2	e.25	e.00	e.00	e1.8	5.5	e3.8	e8.1	1.2	2.3	7.0
9	e5.6	e2.3	e.21	e.00	e.11	e1.9	4.7	1.6	e6.0	1.2	2.4	7.3
10	e5.0	e2.2	e.20	e.00	e.17	e2.0	4.1	1.3	e5.4	1.2	2.5	7.7
11	e4.6	e2.2	e.19	e.00	e.18	e2.3	3.6	1.1	1.4	1.1	2.7	8.1
12	e2.8	e2.0	e.18	e.00	e.20	e2.7	3.3	1.0	1.8	1.2	2.6	8.6
13	e2.6	e1.7	e.18	e.00	e.17	e3.2	3.1	e.80	1.9	1.3	2.6	9.0
14	e2.4	e1.5	e.17	e.00	e.16	e3.7	2.9	e.00	2.0	1.3	2.3	8.8
15	e2.3	e1.3	e.17	e.00	e.16	e4.4	2.6	.00	2.0	1.2	2.1	8.6
16	e2.3	e2.2	e.16	e.00	e.15	e4.5	2.5	.00	2.0	1.3	2.0	8.3
17	e2.3	e2.3	e.16	e.00	e.13	e4.5	2.4	.00	2.0	1.4	2.0	8.2
18	e2.3	e2.2	e.16	e.00	e.20	e5.6	2.1	.00	2.1	1.4	2.0	7.8
19	e2.3	e2.2	e.15	e.00	e.35	e6.8	2.1	.00	2.2	1.5	2.1	7.3
20	e2.4	e2.1	e.15	e.00	e.43	e8.0	2.1	.00	2.3	1.6	2.1	6.9
21	e2.6	e2.3	e.15	e.00	e.36	e10	1.7	.00	2.3	1.8	2.5	6.5
22	e2.7	e2.4	e.15	e.00	e.45	e11	1.5	.00	2.2	1.8	2.8	6.3
23	e2.8	e2.3	e.15	e.00	e.70	e11	1.4	.00	2.1	2.1	3.1	6.1
24	e2.8	e2.1	e.15	e.00	e.66	e11	1.4	.00	2.1	2.6	3.3	5.9
25	e2.8	e2.0	e.15	e.00	e.66	9.9	1.3	.00	2.1	2.8	3.4	5.8
26	e2.8	e1.9	e.15	e.00	e.66	9.4	1.2	.00	2.2	2.9	3.4	5.7
27	e2.8	e1.5	e.15	e.00	e.66	8.9	1.3	.00	2.2	2.9	3.7	5.6
28	e2.8	e1.3	e.15	e.00	e.98	9.1	1.1	.00	2.0	2.8	3.9	5.8
29	e2.8	e1.1	e.15	e.00	---	11	.95	e4.0	2.0	2.6	4.2	6.0
30	e2.5	e1.0	e.15	e.00	---	11	1.1	e10	2.0	2.3	4.4	6.0
31	e2.3	---	e.13	e.00	---	9.8	---	e5.7	---	2.2	4.5	---
TOTAL	89.5	57.6	7.87	0.57	7.54	172.9	105.75	34.67	112.1	54.2	83.6	202.2
MEAN	2.89	1.92	.25	.018	.27	5.58	3.52	1.12	3.74	1.75	2.70	6.74
MAX	6.0	2.4	.88	.16	.98	11	9.0	10	9.1	2.9	4.5	9.0
MIN	2.3	1.0	.13	.00	.00	1.0	.95	.00	1.4	1.1	2.0	4.7
AC-FT	178	114	16	1.1	15	343	210	69	222	108	166	401

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1993, BY WATER YEAR (WY)

	4.05	2.23	.77	.63	1.04	3.83	2.05	2.92	3.76	3.36	2.85	4.27
MEAN	4.05	2.23	.77	.63	1.04	3.83	2.05	2.92	3.76	3.36	2.85	4.27
MAX	5.21	2.54	1.28	1.24	1.78	5.58	3.52	4.72	3.78	4.98	3.00	6.74
(WY)	1992	1992	1992	1992	1992	1993	1992	1992	1992	1992	1992	1993
MIN	2.89	1.92	.25	.018	.27	2.07	.57	1.12	3.74	1.75	2.70	2.91
(WY)	1993	1993	1993	1993	1993	1992	1992	1993	1993	1993	1993	1991

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1991 - 1993

ANNUAL TOTAL	928.53	928.50	
ANNUAL MEAN	2.54	2.54	2.71
HIGHEST ANNUAL MEAN			2.87
LOWEST ANNUAL MEAN			2.54
HIGHEST DAILY MEAN	15	11	15
LOWEST DAILY MEAN	.13	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.15	.00	.00
ANNUAL RUNOFF (AC-FT)	1840	1840	1960
10 PERCENT EXCEEDS	5.0	6.9	6.0
50 PERCENT EXCEEDS	2.4	2.0	2.3
90 PERCENT EXCEEDS	.35	.00	.17

e Estimated

## GREEN RIVER BASIN

09274900 WEST FORK DUCHESNE RIVER BELOW VAT DIVERSION NEAR HANNA, UT

LOCATION.--Lat 40°27'01", long 111°00'13", in SE $\frac{1}{4}$ /NW $\frac{1}{4}$ /SE $\frac{1}{4}$  sec. 27, T. 1 N., R. 10 W., Uintah Meridian, Wasatch County, Hydrologic Unit 14060003, on right bank 180 ft below Vat diversion, approximately 15 mi northwest of Hanna.

DRAINAGE AREA.--37.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,800 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow is regulated by the Vat Tunnel diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 414 ft<sup>3</sup>/s May 26, 1993, gage height, 3.10 ft; minimum daily discharge, 2.9 ft<sup>3</sup>/s Aug. 28, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 414 ft<sup>3</sup>/s May 26, gage height, 3.10 ft; minimum daily discharge, 4.4 ft<sup>3</sup>/s Apr. 27-29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	7.4	6.9	6.8	e5.4	5.8	8.3	7.5	193	36	9.0	11
2	5.9	7.1	6.9	6.9	e5.4	5.4	8.3	7.7	156	11	9.6	11
3	5.7	6.5	6.2	7.2	5.7	5.6	8.0	7.7	88	38	20	11
4	5.8	6.5	5.9	e6.7	e5.4	5.5	8.8	7.1	12	34	20	11
5	5.6	7.3	6.7	e6.3	e5.4	5.7	9.0	6.8	34	29	20	11
6	5.5	7.5	6.3	e6.7	e5.6	5.7	8.3	7.0	9.3	20	15	11
7	5.3	7.7	6.3	e7.0	6.1	6.0	8.0	7.2	7.4	17	17	9.9
8	5.3	7.5	6.5	6.8	5.9	6.3	8.4	6.9	7.7	14	19	9.7
9	5.2	6.8	7.6	6.8	5.9	6.2	7.0	6.8	8.1	12	13	9.6
10	5.3	6.1	6.8	6.8	5.5	6.3	5.5	6.9	16	11	8.5	9.5
11	5.3	6.2	6.6	7.2	5.2	6.2	5.5	6.9	27	9.0	9.1	9.6
12	5.3	7.0	6.8	e6.8	4.9	5.4	5.4	6.7	45	8.8	8.7	10
13	5.6	7.2	6.2	e6.6	4.7	5.4	5.1	6.5	28	8.9	8.8	9.9
14	5.6	6.9	6.4	e6.6	4.5	6.0	5.1	8.3	32	8.6	8.8	9.5
15	5.6	6.8	7.6	6.6	5.5	5.7	5.1	50	32	8.7	8.8	9.5
16	5.6	6.8	7.2	6.1	6.0	5.9	5.1	54	14	8.8	8.6	10
17	5.5	6.8	8.2	5.7	5.9	5.9	5.4	50	14	15	8.9	12
18	5.7	6.6	7.3	5.9	5.4	6.3	5.3	80	10	18	9.1	12
19	5.7	6.8	6.7	5.6	6.0	6.2	4.9	134	8.2	14	8.8	11
20	5.7	6.4	7.6	5.6	5.6	6.3	5.1	190	8.2	9.3	8.8	10
21	5.7	5.9	8.0	5.9	5.2	6.4	5.3	221	8.2	8.8	8.8	9.9
22	5.7	6.6	8.4	5.4	5.5	6.3	5.0	270	8.2	8.8	8.8	9.3
23	5.9	6.6	8.2	5.1	5.5	7.1	4.7	228	34	19	8.8	9.5
24	5.9	6.4	7.7	6.4	5.8	7.8	4.7	208	8.1	37	8.8	9.3
25	6.4	6.0	e8.0	5.9	5.2	8.1	4.7	203	8.3	29	9.1	9.0
26	7.2	6.9	e7.8	e5.6	5.6	8.8	4.5	256	8.5	20	8.9	9.1
27	6.6	6.8	e8.0	e5.4	5.8	9.2	4.4	233	8.5	8.4	8.9	9.0
28	7.2	7.2	e8.2	e5.4	5.9	9.4	4.4	164	8.6	8.7	11	9.1
29	7.2	6.4	e7.6	e5.2	---	8.8	4.4	160	8.3	8.8	11	9.2
30	8.4	6.6	7.5	e4.9	---	8.0	5.4	167	22	9.3	10	9.1
31	8.5	---	6.3	e5.2	---	7.6	---	175	---	9.1	11	---
TOTAL	185.8	203.3	222.4	191.1	154.5	205.3	179.1	2943.0	872.6	498.0	344.6	300.7
MEAN	5.99	6.78	7.17	6.16	5.52	6.62	5.97	94.9	29.1	16.1	11.1	10.0
MAX	8.5	7.7	8.4	7.2	6.1	9.4	9.0	270	193	38	20	12
MIN	5.2	5.9	5.9	4.9	4.5	5.4	4.4	6.5	7.4	8.4	8.5	9.0
AC-FT	369	403	441	379	306	407	355	5840	1730	988	684	596

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1993, BY WATER YEAR (WY)

	1990	1991	1992	1993
MEAN	6.55	6.99	7.28	6.76
MAX	8.76	9.35	9.30	9.31
(WY)	1992	1992	1992	1992
MIN	5.37	5.01	5.57	5.68
(WY)	1991	1990	1990	1990

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1990 - 1993

ANNUAL TOTAL	3969.1	6300.4		
ANNUAL MEAN	10.8	17.3		
HIGHEST ANNUAL MEAN			12.5	
LOWEST ANNUAL MEAN			17.3	1993
HIGHEST DAILY MEAN	65	May 21	270	May 22 1993
LOWEST DAILY MEAN	2.9	Aug 28	4.4	Apr 27 1992
ANNUAL SEVEN-DAY MINIMUM	3.2	Aug 27	4.5	Apr 23 1992
ANNUAL RUNOFF (AC-FT)	7870		12500	
10 PERCENT EXCEEDS	15		20	
50 PERCENT EXCEEDS	7.6		7.2	
90 PERCENT EXCEEDS	5.5		5.4	

e Estimated

## GREEN RIVER BASIN

73

09275500 WEST FORK DUCHESNE RIVER NEAR HANNA, UT

LOCATION.--Lat 40°27'01", long 110°53'01", in SE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, sec. 27, T. 1 N., R. 9 W., Uinta Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank 1,500 ft upstream from Wolf Creek, and 7.1 mi northwest of Hanna.

DRAINAGE AREA.--61.6 mi<sup>2</sup>.

PERIOD OF RECORD.--May to October 1904 (gage heights only, fragmentary), August 1921 to March 1922, October 1922 to September 1923, October 1945 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,218 ft above sea level, from topographic map. Prior to Oct. 1, 1923, nonrecording gages at approximately same site at different datums. Oct. 1, 1923 to Sept. 3, 1986 at datum 1.0 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. One small diversion for irrigation of about 100 acres above station. On March 27, 1986, the U.S. Bureau of Reclamation began diverting water from the West Fork into the Strawberry Aqueduct for transmountain diversion to Strawberry Reservoir. The diversion gates are located 8 mi above the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 758 ft<sup>3</sup>/s June 5, 1967, maximum gage height, 4.40 ft June 4, 1952, datum then in use; minimum discharge recorded, 0.19 ft<sup>3</sup>/s Mar. 29, 1975, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 501 ft<sup>3</sup>/s May 26, gage height, 4.08 ft; minimum daily discharge, 6.0 ft<sup>3</sup>/s Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	12	11	e9.2	e8.2	e9.8	21	27	238	55	19	19
2	8.1	13	11	e9.4	e8.6	e10	22	28	250	24	18	18
3	8.0	10	10	e8.3	e8.6	e11	20	30	159	31	23	18
4	8.1	9.6	e9.0	e7.0	e8.1	e12	22	33	61	48	29	17
5	7.9	12	e8.7	e6.0	e7.5	e12	23	30	61	45	30	17
6	7.8	11	9.9	e7.0	e8.3	e12	21	31	45	37	27	18
7	7.9	11	9.4	e7.7	e9.0	e13	19	31	36	30	23	e18
8	7.8	12	9.9	e8.1	e9.7	e13	20	30	34	27	27	e18
9	7.8	11	10	e8.5	e10	e12	22	28	32	26	27	e18
10	7.9	8.2	10	e8.1	e10	11	20	28	33	24	21	e18
11	7.8	e9.5	10	e7.8	e10	11	19	30	46	22	23	e18
12	8.1	11	10	e7.6	e9.3	12	17	33	71	21	20	e18
13	8.0	12	e9.4	e7.8	e8.3	12	16	37	63	20	19	e19
14	8.1	11	e8.6	e7.6	e7.8	11	17	42	56	20	18	e19
15	8.1	11	e8.2	e8.0	e7.8	13	17	81	66	20	17	e20
16	8.1	11	e9.0	e8.3	e8.1	13	17	120	50	19	17	e20
17	8.1	11	e9.7	e8.8	e8.3	13	19	91	30	22	16	e22
18	8.3	10	e9.3	e8.9	e9.0	15	20	135	31	26	17	e22
19	8.4	10	e8.7	e8.7	e9.9	15	18	175	28	27	17	e21
20	8.4	9.2	e8.3	e8.6	e8.8	15	17	269	27	20	19	e20
21	8.6	9.4	e9.0	e8.9	e8.5	15	17	292	28	19	18	e20
22	8.8	10	e9.2	e9.3	e9.0	15	19	336	27	20	16	e20
23	9.0	e9.4	e9.0	e8.4	e8.6	16	21	305	48	20	16	e20
24	8.9	e8.8	e8.6	e8.0	e7.7	18	20	277	27	26	16	e19
25	10	e8.6	e8.4	e8.3	e7.0	20	20	268	25	41	16	e19
26	10	e8.6	e9.3	e7.9	e6.4	22	22	318	23	37	16	e19
27	9.7	e9.3	e10	e8.0	e6.7	25	24	358	23	22	16	e19
28	11	e9.9	e11	e7.8	e8.4	25	24	236	23	20	17	e18
29	12	11	e11	e7.7	---	23	23	211	23	19	19	e18
30	14	e9.2	e10	e7.6	---	21	25	231	28	19	19	e18
31	14	---	e9.3	e7.8	---	19	---	246	---	19	18	---
TOTAL	277.4	309.7	294.9	251.1	238.6	464.8	602	4387	1692	826	614	568
MEAN	8.95	10.3	9.51	8.10	8.52	15.0	20.1	142	56.4	26.6	19.8	18.9
MAX	14	13	11	9.4	10	25	25	358	250	55	30	22
MIN	7.8	8.2	8.2	6.0	6.4	9.8	16	27	23	19	16	17
AC-FT	550	614	585	498	473	922	1190	8700	3360	1640	1220	1130

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1993, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993
MEAN	13.4	12.6	11.4	10.4	10.2	13.2	26.8
MAX	29.1	20.8	16.5	13.8	12.5	15.4	39.9
(WY)	1987	1988	1989	1990	1991	1992	1993
MIN	8.95	8.84	9.35	8.10	8.52	9.35	16.6
(WY)	1993	1990	1990	1993	1993	1991	1990

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1987 - 1993

ANNUAL TOTAL	5543.7	10525.5	19.8
ANNUAL MEAN	15.1	28.8	28.8
HIGHEST ANNUAL MEAN			15.1
LOWEST ANNUAL MEAN			15.1
HIGHEST DAILY MEAN	73	358	358
LOWEST DAILY MEAN	5.7	6.0	5.7
ANNUAL SEVEN-DAY MINIMUM	6.1	7.5	6.1
ANNUAL RUNOFF (AC-FT)	11000	20880	14340
10 PERCENT EXCEEDS	19	37	34
50 PERCENT EXCEEDS	11	17	14
90 PERCENT EXCEEDS	8.0	8.1	9.0

e Estimated



## GREEN RIVER BASIN

09276600 WEST FORK DUCHESNE RIVER ABOVE NORTH FORK, NEAR HANNA, UT

LOCATION.--Lat 40°27'42", long 110°50'10", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 19, T. 1 N., R. 8 W., Uinta Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank .2 mi above confluence with North Fork of Duchesne River and 4.5 mi northwest of Hanna.

DRAINAGE AREA.--89.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,880 ft above sea level, from topographic map.

REMARKS.--Record good except for estimated daily discharges, which are poor. One small diversion for irrigation above station. Flow regulated by Vat diversion, 12 miles above the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 495 ft<sup>3</sup>/s May 22, 26, 1993, gage height, 3.83 ft; minimum daily discharge 6.8 ft<sup>3</sup>/s Aug. 30, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 495 ft<sup>3</sup>/s May 22, 26, gage height, 3.83 ft; minimum daily discharge 7.6 ft<sup>3</sup>/s Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	14	e11	e9.8	e12	e12	20	28	218	61	21	22
2	9.0	16	e11	e10	15	e13	21	29	196	28	21	21
3	9.2	13	e10	e9.0	e14	e13	20	31	142	48	28	20
4	9.3	15	e9.8	e8.3	e13	e14	21	34	54	47	32	20
5	9.0	14	e9.6	e8.0	e12	e14	23	32	62	46	33	21
6	9.0	14	e11	e8.5	e13	14	21	33	50	36	31	21
7	7.6	13	e10	e9.2	e14	14	19	33	41	32	30	21
8	7.7	13	e11	e10	15	17	20	32	38	30	36	21
9	9.6	13	e11	e11	14	16	22	31	36	28	34	21
10	9.4	e11	e12	e11	14	14	20	31	36	26	27	21
11	9.3	e12	13	e10	14	13	19	32	46	24	29	21
12	9.4	e13	13	e10	e13	12	18	36	70	24	27	21
13	9.3	14	e12	e11	e12	14	17	39	55	23	24	23
14	9.4	13	e11	e12	e11	12	17	44	50	23	22	23
15	9.3	13	e10	e12	e12	13	17	73	56	22	22	24
16	9.4	12	e11	e13	e13	13	17	109	46	22	21	24
17	9.6	12	e12	e12	e14	13	18	79	35	26	21	27
18	9.5	12	e12	e12	e15	15	20	126	41	30	21	27
19	9.5	12	e11	e12	15	15	18	152	31	29	21	26
20	9.5	12	e10	e12	14	15	18	240	30	23	22	24
21	9.3	e12	e10	e13	15	15	18	244	31	22	22	23
22	9.5	e11	e11	e12	14	14	20	420	30	22	21	23
23	11	e11	e11	e12	14	16	22	313	53	28	20	23
24	13	e10	e10	e11	15	17	21	309	30	53	20	22
25	14	e10	e10	e12	13	18	21	264	28	42	20	22
26	14	e9.6	e11	e12	e11	21	22	301	28	38	20	22
27	13	e10	e11	e11	e12	24	25	325	27	24	20	22
28	15	e11	e11	e11	e12	24	25	213	27	22	20	21
29	15	e11	e11	e11	---	22	25	196	27	23	22	21
30	16	e10	e11	e11	---	20	26	206	29	22	22	21
31	16	---	e11	e11	---	19	---	219	---	22	22	---
TOTAL	329.3	366.6	339.4	337.8	375	486	611	4254	1643	946	752	669
MEAN	10.6	12.2	10.9	10.9	13.4	15.7	20.4	137	54.8	30.5	24.3	22.3
MAX	16	16	13	13	15	24	26	420	218	61	36	27
MIN	7.6	9.6	9.6	8.0	11	12	17	28	27	22	20	20
AC-FT	653	727	673	670	744	964	1210	8440	3260	1880	1490	1330

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1993, BY WATER YEAR (WY)

	1990	1991	1992	1993
MEAN	13.4	13.9	13.1	12.0
MAX	18.6	17.0	15.0	13.0
(WY)	1992	1992	1991	1992
MIN	10.6	11.3	10.9	10.9
(WY)	1993	1990	1993	1993

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1990 - 1993

ANNUAL TOTAL	5595.2	11109.1	21.9	
ANNUAL MEAN	15.3	30.4	30.4	
HIGHEST ANNUAL MEAN			16.7	1993
LOWEST ANNUAL MEAN			6.8	1992
HIGHEST DAILY MEAN	67	May 6	420	May 22 1993
LOWEST DAILY MEAN	6.8	Aug 30	7.6	Oct 7 1992
ANNUAL SEVEN-DAY MINIMUM	7.4	Aug 28	8.7	Oct 2 1992
ANNUAL RUNOFF (AC-FT)	11100		22030	
10 PERCENT EXCEEDS	18		43	
50 PERCENT EXCEEDS	12		18	
90 PERCENT EXCEEDS	9.3		10	

e Estimated

LOCATION (REVISED).--Lat 40°18'01", long 110°36'06", in SE $\frac{1}{4}$ /SW $\frac{1}{4}$ /SE $\frac{1}{4}$  sec. 18, T. 2 S., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank on upstream side of bridge on State Highway 35, 6 mi upstream from Rock Creek, and 7 mi southeast of Tabiona.

PERIOD OF RECORD.--October 1918 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 6,190 ft above sea level, from topographic map. Prior to Oct. 15, 1934, nonrecording gage, and Oct. 16, 1934 to Nov. 6, 1953, water-stage recorder at site 0.5 mi upstream at various datums. Nov. 7, 1953 to Nov. 7, 1972, at site 1 mi upstream at different datum.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 5,260 ft<sup>3</sup>/s June 16, 1963, gage height, 7.97 ft from floodmarks, caused by failure of Little Deer Creek Dam 20 mi upstream. Rating curve extended above 400 ft<sup>3</sup>/s on basis of slope-area measurement and area-velocity study of peak flow; minimum discharge, 18 ft<sup>3</sup>/s June 5, 6, 1992.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 27	0900	*1,460	*4.48	No other peak greater than base discharge.			
Minimum daily discharge, 49 ft <sup>3</sup> /s Oct. 2.							

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	104	75	64	65	66	106	152	611	194	66	61
2	49	109	75	60	65	65	111	152	609	165	64	61
3	51	106	74	60	63	64	105	156	729	169	61	63
4	57	96	68	e57	65	67	105	170	550	172	82	67
5	56	102	71	e56	e64	68	115	178	467	165	99	67
6	57	96	78	e56	e64	69	106	176	441	145	96	67
7	59	98	78	e56	66	67	102	176	360	138	84	67
8	62	96	74	e58	63	69	103	164	319	118	101	63
9	61	94	79	62	62	72	106	156	292	111	125	65
10	62	87	77	65	62	75	109	150	264	106	103	65
11	65	85	73	64	63	75	107	157	262	94	112	65
12	67	89	76	e64	61	71	102	186	294	96	112	65
13	67	93	72	e63	62	70	102	204	309	89	104	73
14	68	88	70	62	e62	74	101	240	306	78	97	74
15	70	86	e64	64	e64	76	101	299	570	70	94	65
16	72	90	e60	72	e64	78	102	386	679	66	91	68
17	78	87	e60	70	67	84	102	378	580	64	88	76
18	78	86	61	70	e66	106	110	453	515	66	85	88
19	78	85	63	70	67	102	111	488	453	65	72	89
20	76	87	e60	65	67	102	106	594	491	61	64	94
21	78	79	e60	66	64	102	108	610	540	53	75	83
22	77	82	e60	66	64	97	114	662	509	55	71	84
23	77	85	e60	66	64	99	126	628	505	67	71	86
24	79	80	e60	e64	66	105	127	583	418	112	69	85
25	89	76	e60	e64	66	110	126	674	258	91	64	85
26	89	76	e60	e64	62	116	128	1010	232	90	66	86
27	85	78	e62	e64	e62	140	139	1200	219	85	64	85
28	98	79	65	e64	64	128	145	1020	208	75	61	83
29	100	78	61	e64	---	139	151	958	191	74	60	80
30	106	76	61	e64	---	118	151	837	178	73	59	79
31	115	---	59	e64	---	105	---	629	---	71	60	---
TOTAL	2277	2653	2076	1968	1794	2779	3427	13826	12359	3078	2520	2239
MEAN	73.5	88.4	67.0	63.5	64.1	89.6	114	446	412	99.3	81.3	74.6
MAX	115	109	79	72	67	140	151	1200	729	194	125	94
MIN	49	76	59	56	61	64	101	150	178	53	59	61
AC-FT	4520	5260	4120	3900	3560	5510	6800	27420	24510	6110	5000	4440

MEAN	117	120	108	96.2	93.5	100	156	501	625	201	109	107
MAX	230	180	151	147	124	153	348	1165	1657	690	216	233
(WY)	1983	1983	1984	1966	1986	1986	1943	1952	1921	1975	1983	1927
MIN	37.5	57.6	67.0	59.5	53.2	53.8	53.9	63.9	54.7	51.4	44.1	48.7
(WY)	1935	1935	1993	1935	1935	1935	1977	1992	1992	1988	1977	1934

ANNUAL TOTAL	23956		50996						
ANNUAL MEAN	65.5		140			195			
HIGHEST ANNUAL MEAN						354			1922
LOWEST ANNUAL MEAN						68.9			1992
HIGHEST DAILY MEAN	127	Apr 30	1200	May 27	2490			Jun 13	1921
LOWEST DAILY MEAN	21	Jun 5	49	Oct 2	21			Jun 5	1992
ANNUAL SEVEN-DAY MINIMUM	30	May 31	54	Oct 1	30			May 31	1992
ANNUAL RUNOFF (AC-FT)	47520		101200		141000				
10 PERCENT EXCEEDS	85		302		406				
50 PERCENT EXCEEDS	67		79		110				
90 PERCENT EXCEEDS	46		61		75				

e Estimated

## GREEN RIVER BASIN

## 09277800 ROCK CREEK ABOVE SOUTH FORK, NEAR HANNA, UT

LOCATION.--Lat 40°33'27", long 110°41'50", in NW¼, SE¼, NE¼, sec. 20, T. 2 N., R. 7 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 500 ft downstream from upper Stillwater Dam, 0.9 mi upstream from South Fork, and 11.2 mi north of Hanna.

DRAINAGE AREA.--98.9 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to March 1984, October 1988 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,967.7 ft above sea level, (levels by Bureau of Reclamation). Prior to Nov. 21, 1988 at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Stillwater Dam since Nov. 3, 1987. Total capacity 32,000 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,760 ft<sup>3</sup>/s June 17, 1971, gage height, 4.95 ft; minimum measured, 6.9 ft<sup>3</sup>/s Dec. 23, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 578 ft<sup>3</sup>/s June 28, gage height, 3.25 ft; minimum daily discharge, 12 ft<sup>3</sup>/s Aug. 31, Sept. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	15	18	18	18	20	22	19	305	309	17	12
2	17	16	18	18	18	20	21	19	311	308	17	13
3	17	16	18	19	18	20	22	20	247	322	17	13
4	17	18	e18	e18	18	19	24	20	74	182	16	13
5	17	19	18	18	19	20	22	19	46	125	15	13
6	17	18	18	18	19	20	21	19	34	84	16	13
7	15	19	18	18	19	20	21	19	14	53	15	13
8	13	19	19	18	19	20	22	18	14	73	15	13
9	16	19	20	18	19	21	23	19	14	30	15	13
10	16	19	20	18	19	20	23	20	14	28	15	13
11	16	18	19	18	19	20	23	21	14	31	15	13
12	16	18	19	17	19	20	24	21	14	25	15	13
13	16	18	19	17	19	20	25	20	166	28	15	13
14	16	18	18	18	e19	20	24	19	301	16	15	13
15	16	18	19	18	e19	20	24	19	374	15	14	13
16	16	18	e17	18	19	20	24	16	453	16	14	14
17	15	18	17	17	19	20	23	77	454	16	14	13
18	15	19	18	17	20	20	23	106	218	16	14	13
19	16	18	e18	18	21	20	23	148	204	16	14	13
20	16	19	17	18	21	20	23	183	396	16	14	13
21	16	18	18	18	21	19	23	216	497	17	14	13
22	16	18	18	18	21	20	23	253	504	17	14	14
23	16	18	18	18	21	22	23	281	504	17	14	14
24	16	18	18	18	20	21	22	287	305	16	14	14
25	17	16	18	18	19	20	22	291	108	17	13	13
26	16	18	19	18	e19	21	22	294	109	17	13	14
27	16	18	18	18	20	23	23	302	164	17	13	14
28	16	18	18	18	20	21	23	302	428	17	13	14
29	17	18	19	18	---	19	23	350	429	17	13	14
30	16	18	19	18	---	22	21	383	429	17	13	14
31	15	---	18	18	---	22	---	342	358	16	13	16
						22	---	295	---	16	12	---
TOTAL	497	538	567	555	542	630	682	4116	7073	1893	448	400
MEAN	16.0	17.9	18.3	17.9	19.4	20.3	22.7	133	236	61.1	14.5	13.3
MAX	17	19	20	19	21	23	25	383	504	322	17	16
MIN	13	15	17	17	18	19	21	16	14	15	12	12
AC-FT	986	1070	1120	1100	1080	1250	1350	8160	14030	3750	889	793

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1993, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993
MEAN	15.3	15.2	15.1	14.4	15.7
MAX	25.7	20.5	18.3	17.9	19.4
(WY)	1989	1989	1993	1993	1993
MIN	9.59	9.99	11.0	10.7	12.5
(WY)	1991	1990	1990	1991	1990

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1989 - 1993

ANNUAL TOTAL	7669.6	17941	27.6	
ANNUAL MEAN	21.0	49.2	49.2	1993
HIGHEST ANNUAL MEAN			19.9	1991
LOWEST ANNUAL MEAN			7.1	1990
HIGHEST DAILY MEAN	60	504	7.9	Jun 11 1990
LOWEST DAILY MEAN	9.6	12	8.1	Oct 15 1990
ANNUAL SEVEN-DAY MINIMUM	11	13		Oct 9 1990
ANNUAL RUNOFF (AC-FT)	15210	35590		
10 PERCENT EXCEEDS	36	134		
50 PERCENT EXCEEDS	18	18		
90 PERCENT EXCEEDS	13	14		

e Estimated

## GREEN RIVER BASIN

77

09279000 ROCK CREEK NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°29'36", long 110°34'39", in SE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 9, T. 1 N., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on right bank at Lower Stillwater damsite "B", 0.1 mi upstream from Corral Creek, 6.8 mi downstream from South Fork, and 11.9 mi northwest of Mountain Home.

DRAINAGE AREA.--147 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,250 ft above sea level, from river-profile map. Prior to Apr. 12, 1939, nonrecording gage at site 300 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow partially regulated by Upper Stillwater Reservoir 8 mi upstream, beginning Nov. 3, 1987. Total capacity, 32,000 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,920 ft<sup>3</sup>/s June 18, 1971, gage height, 5.98 ft; maximum gage height, 6.26 ft June 4, 1986, from floodmarks; minimum recorded, 7.0 ft<sup>3</sup>/s Mar. 13, 1940, Mar. 20, 1942 (probably caused by ice jams above station).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 590 ft<sup>3</sup>/s June 29, gage height, 3.73 ft; minimum daily discharge, 29 ft<sup>3</sup>/s, Oct. 5, 8; minimum instantaneous discharge 2.5 ft<sup>3</sup>/s, Feb. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	35	37	40	34	37	46	41	346	356	43	39
2	31	38	38	39	33	36	46	41	354	354	43	38
3	31	35	35	45	31	36	45	41	319	387	40	38
4	30	34	34	38	32	38	51	44	134	243	42	38
5	29	36	32	43	33	36	52	43	92	178	43	38
6	31	36	34	44	35	35	47	43	85	147	43	39
7	33	35	34	39	31	36	44	42	56	106	43	39
8	29	36	38	37	31	36	46	40	51	119	49	38
9	31	36	38	35	33	37	48	39	49	82	57	38
10	32	36	39	34	32	37	49	39	47	67	55	37
11	33	39	37	e35	32	38	46	41	47	80	50	36
12	33	34	38	e38	31	36	45	40	48	65	45	37
13	33	34	33	40	37	36	45	41	140	71	43	38
14	32	35	33	40	e33	36	46	41	331	54	43	39
15	31	34	35	33	35	37	45	41	427	51	43	39
16	31	35	32	34	33	38	46	41	564	50	42	40
17	31	36	35	33	34	40	45	81	540	49	42	43
18	32	41	38	33	34	42	46	122	320	48	41	42
19	32	41	32	34	37	41	43	168	232	48	41	39
20	31	39	35	35	39	41	43	201	410	47	42	39
21	32	37	37	35	41	41	43	236	551	46	46	38
22	32	37	36	33	35	42	45	281	554	46	42	38
23	32	40	36	39	35	45	44	360	554	59	41	38
24	32	35	36	35	36	46	42	345	426	58	41	38
25	38	38	34	34	33	46	42	348	161	50	41	38
26	36	31	34	35	33	47	42	344	157	51	41	38
27	35	33	36	33	37	57	44	352	163	50	40	37
28	41	37	39	34	35	55	43	388	452	51	40	38
29	40	34	40	34	---	49	43	444	474	44	39	38
30	45	32	40	33	---	47	43	413	414	44	39	37
31	40	---	45	31	---	45	---	342	---	43	39	---
TOTAL	1031	1079	1120	1125	955	1269	1355	5083	8498	3144	1339	1152
MEAN	33.3	36.0	36.1	36.3	34.1	40.9	45.2	164	283	101	43.2	38.4
MAX	45	41	45	45	41	57	52	444	564	387	57	43
MIN	29	31	32	31	31	35	42	39	47	43	39	36
AC-FT	2040	2140	2220	2230	1890	2520	2690	10080	16860	6240	2660	2280

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1993, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993
MEAN	41.5	38.3	34.7	31.8	33.1	35.9
MAX	69.1	51.1	40.4	38.5	37.4	44.1
(WY)	1988	1988	1989	1989	1989	1989
MIN	32.0	30.2	29.5	27.3	29.0	29.9
(WY)	1990	1990	1991	1991	1988	1988

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1988 - 1993

	1992	1993	1988	1989	1990	1991	1992	1993
ANNUAL TOTAL	14539	27150						
ANNUAL MEAN	39.7	74.4						
HIGHEST ANNUAL MEAN			61.0					
LOWEST ANNUAL MEAN			108					
HIGHEST DAILY MEAN	76	564	40.1					
LOWEST DAILY MEAN	25	29	834					
ANNUAL SEVEN-DAY MINIMUM	29	31	22					
ANNUAL RUNOFF (AC-FT)	28840	53850	26					
10 PERCENT EXCEEDS	60	162	70					
50 PERCENT EXCEEDS	36	40	40					
90 PERCENT EXCEEDS	31	33	30					

e Estimated

## GREEN RIVER BASIN

09279100 ROCK CREEK NEAR TALMAGE, UT

LOCATION.--Lat 40°18'40", long 110°29'36", in SE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 18, T. 2 S., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 1.5 mi upstream from mouth, 4.1 mi southwest of Talmage and 11.1 mi northwest of Duchesne.

DRAINAGE AREA.--238 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,119.3 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Upper Stillwater Dam (total capacity 32,000 acre-feet) completed, and storage started, in November 1987.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft<sup>3</sup>/s June 6, 1986, gage height, 4.57 ft; minimum recorded, 6.0 ft<sup>3</sup>/s Nov. 28, 1976, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
June 17	1000	*566	*2.60				

Minimum daily discharge, 28 ft<sup>3</sup>/s, Feb. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	44	e40	e48	e45	e39	58	52	333	344	44	45
2	39	46	e41	e52	e50	e41	60	52	345	335	45	43
3	38	45	e36	e46	e48	e43	58	52	350	372	43	43
4	39	43	e35	e35	e38	e45	56	56	176	230	44	43
5	38	44	e34	e33	e38	e46	61	62	101	188	47	43
6	39	44	e35	e42	e42	e48	57	59	95	143	51	46
7	41	43	e36	e48	e45	e49	53	60	73	109	54	45
8	41	44	e39	e47	e48	e40	51	55	62	103	53	43
9	39	44	e42	e52	e50	e51	55	51	58	86	62	43
10	41	e41	e44	e51	e50	e52	58	50	56	62	64	42
11	41	e39	e42	e43	e50	e49	50	53	53	74	59	41
12	41	e40	e43	e37	e45	e47	49	55	53	63	51	41
13	40	e42	e40	e39	e40	e46	49	59	75	67	46	42
14	40	e43	e38	e39	e32	e45	49	60	307	55	46	44
15	39	43	e40	e50	e34	45	51	59	365	51	45	44
16	39	41	e39	e51	e36	46	52	62	527	51	45	44
17	40	41	e41	e50	e36	49	51	77	548	50	43	50
18	40	46	e43	e52	e36	54	53	124	391	50	45	48
19	40	47	e42	e50	e47	52	50	159	200	49	44	46
20	40	46	e40	e48	e45	52	49	192	342	48	47	44
21	40	e39	e45	e51	e39	51	50	227	530	47	51	43
22	41	e45	e46	e49	e41	50	51	264	535	47	47	42
23	41	e39	e47	e40	e40	52	52	336	532	55	45	42
24	40	e36	e44	e47	e32	54	50	323	472	68	45	43
25	46	e34	e43	e45	e29	55	49	342	160	54	44	43
26	46	e35	e43	e43	e28	55	51	327	142	53	46	43
27	43	e36	e43	e42	e32	66	53	338	140	49	46	43
28	48	e41	e50	e39	e37	66	53	359	366	55	45	43
29	49	e37	e52	e41	---	70	53	435	456	47	44	42
30	52	e39	e55	e43	---	60	54	422	401	46	43	42
31	53	---	e43	e44	---	57	---	331	---	44	44	---
TOTAL	1293	1247	1301	1404	1133	1575	1586	5153	8244	3095	1478	1306
MEAN	41.7	41.6	42.0	45.3	40.5	50.8	52.9	166	275	99.8	47.7	43.5
MAX	53	47	55	52	50	70	61	435	548	372	64	50
MIN	38	34	34	33	28	39	49	50	53	44	43	41
AC-FT	2560	2470	2580	2780	2250	3120	3150	10220	16350	6140	2930	2590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1993, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993
MEAN	45.2	44.2	41.5	40.2	40.6	44.1
MAX	67.4	62.6	50.8	47.5	46.9	50.8
(WY)	1988	1988	1988	1992	1992	1993
MIN	37.2	36.5	35.1	32.5	37.6	37.9
(WY)	1991	1990	1991	1991	1991	1988

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1988 - 1993

ANNUAL TOTAL	17603	28815	
ANNUAL MEAN	48.1	78.9	63.7
HIGHEST ANNUAL MEAN			104
LOWEST ANNUAL MEAN			47.3
HIGHEST DAILY MEAN	81	548	782
LOWEST DAILY MEAN	33	28	28
ANNUAL SEVEN-DAY MINIMUM	35	34	32
ANNUAL RUNOFF (AC-FT)	34920	57150	46160
10 PERCENT EXCEEDS	66	159	68
50 PERCENT EXCEEDS	46	47	45
90 PERCENT EXCEEDS	39	39	37

e Estimated

## GREEN RIVER BASIN

79

09279150 DUCHESNE RIVER ABOVE KNIGHT DIVERSION, NEAR DUCHESNE, UT

LOCATION.--Lat 40°16'14", long 110°26'31", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, sec. 34, T. 2 S., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank at downstream edge of bridge on State Highway 35, 1.7 mi upstream from Knight diversion dam, 3.9 mi downstream from Rock Creek, and 7.7 mi north-northwest of Duchesne.

DRAINAGE AREA.--623 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1970 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,840 ft above sea level, from topographic map. Prior to Apr. 25, 1973, at site 150 ft upstream at different gage datum.

REMARKS.--No estimated daily discharges. Records good. Several diversions above station for irrigation, including a transmountain diversion to the Great Basin through Duchesne Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,970 ft<sup>3</sup>/s June 6, 1986, gage height, 7.52 ft, from flood-marks; minimum, 37 ft<sup>3</sup>/s Jan. 31, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 27	0900	*2270	*6.75	No other peak greater than base discharge.			

Minimum daily discharge, 70 ft<sup>3</sup>/s Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	155	134	125	124	118	147	166	907	536	90	95
2	71	161	138	132	120	117	152	160	914	492	89	91
3	71	162	131	117	115	111	147	163	1110	517	89	91
4	74	154	115	104	117	112	149	165	745	382	97	94
5	75	157	106	112	119	118	163	181	571	339	122	98
6	76	156	110	118	113	121	156	179	542	273	131	102
7	77	154	111	132	122	122	142	179	434	227	122	103
8	78	157	128	131	125	125	142	164	377	190	148	95
9	77	157	135	127	123	131	147	147	346	171	201	97
10	80	151	140	129	126	135	153	135	318	124	194	95
11	84	146	135	131	119	138	149	135	314	126	205	94
12	87	154	137	124	118	128	143	156	350	117	193	94
13	94	148	123	121	108	125	142	172	366	118	183	103
14	95	145	110	128	113	130	142	211	599	105	170	115
15	94	145	112	132	107	135	141	259	972	96	158	108
16	104	141	105	134	114	140	143	360	1220	90	147	108
17	116	141	106	135	117	140	143	394	1240	89	149	111
18	120	143	119	135	115	162	149	516	969	90	140	129
19	122	145	108	136	127	165	148	625	680	94	116	131
20	123	145	104	122	126	158	142	846	834	92	106	134
21	122	138	125	129	119	155	144	903	1110	90	125	124
22	123	141	129	128	123	150	150	1020	1080	89	119	126
23	122	138	128	119	117	144	158	1070	1050	97	116	129
24	127	133	123	114	123	151	160	1020	925	159	108	128
25	139	127	120	120	122	154	159	1150	457	136	95	128
26	145	109	113	120	103	158	159	1790	386	130	96	131
27	132	113	115	117	117	196	166	1930	358	127	95	130
28	142	139	127	114	117	192	167	1580	535	121	93	127
29	156	131	132	118	---	200	166	1510	621	115	90	128
30	157	124	133	118	---	165	168	1340	573	109	90	125
31	176	---	124	122	---	149	---	935	---	100	93	---
TOTAL	3329	4310	3776	3844	3309	4445	4537	19561	20903	5541	3970	3364
MEAN	107	144	122	124	118	143	151	631	697	179	128	112
MAX	176	162	140	136	127	200	168	1930	1240	536	205	134
MIN	70	109	104	104	103	111	141	135	314	89	89	91
AC-FT	6600	8550	7490	7620	6560	8820	9000	38800	41460	10990	7870	6670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1993, BY WATER YEAR (WY)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	197	195	166	155	149	161	217	697	1183	432	195	170											
MAX	430	308	238	209	198	235	464	1525	2929	1447	443	350											
(WY)	1983	1983	1984	1984	1986	1986	1985	1984	1986	1975	1983	1983											
MIN	100	124	107	117	115	103	86.3	106	94.0	101	93.3	77.6											
(WY)	1978	1978	1991	1978	1977	1977	1977	1990	1992	1992	1977	1992											

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1971 - 1993
ANNUAL TOTAL	41097	80889	
ANNUAL MEAN	112	222	327
HIGHEST ANNUAL MEAN			580
LOWEST ANNUAL MEAN			118
HIGHEST DAILY MEAN	194	1930	4700
LOWEST DAILY MEAN	64	70	59
ANNUAL SEVEN-DAY MINIMUM	66	73	66
ANNUAL RUNOFF (AC-FT)	81520	160400	236600
10 PERCENT EXCEEDS	139	502	630
50 PERCENT EXCEEDS	116	131	174
90 PERCENT EXCEEDS	79	95	113



## GREEN RIVER BASIN

## 09285000 STRAWBERRY RIVER NEAR SOLDIER SPRINGS, UT

LOCATION.--Lat 40°08'00", long 111°01'27", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 16, T. 2 S., R. 10 W., Uintah Meridian, Wasatch County, Hydrologic Unit 14060004, on left bank 300 ft below Soldier Creek Dam, 1.5 mi upstream from Willow Creek, and 3.4 mi south of Soldier Springs.

DRAINAGE AREA.--213 mi<sup>2</sup>, includes approximately 170 mi<sup>2</sup> tributary to Strawberry Reservoir, which includes area above diversion dams on Indian and Trail Hollow Creeks.

PERIOD OF RECORD.--October 1942 to September 1956, October 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,360 ft above sea level, from topographic map. Prior to June 1, 1971, water-stage recorder at site about 0.2 mi upstream at different datum. From June 1, 1971 to Aug. 8, 1974, at site about 0.8 mi downstream at different datum. From Aug. 25, 1983 to Sept. 10, 1985 at site about 300 ft downstream at different datum.

REMARKS.--No estimated daily discharges, records good. Flow regulated by Strawberry Reservoir since July 14, 1912. Capacity, 1,106,500 acre-ft since June 30, 1973; 283,000 acre-ft prior to June 30, 1973. New earthfilled dam located 7 mi below old dam was completed in September 1972 and storage began June 30, 1973. The elevation of the new reservoir reached the elevation of the old reservoir on March 15 and the old dam was breached on June 6, 1985. Approximately 500,000 acre-ft can be diverted to Strawberry Reservoir through a series of tunnels located on Rock Creek, West Fork Duchesne and Currant Creek. Transmountain diversions from the reservoir divert flow to the Great Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft<sup>3</sup>/s May 4, 1952, gage height, 3.84 ft, site and datum then in use, from rating curve extended above 550 ft<sup>3</sup>/s; minimum daily discharge, 0.23 ft<sup>3</sup>/s July and August 1973.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	11	13	11	11	10	11	22	22	21	22	25
2	11	11	13	11	11	10	11	22	22	21	23	25
3	11	11	13	11	11	10	11	22	23	21	23	26
4	12	11	12	11	11	10	11	23	23	21	23	26
5	12	11	11	11	11	10	11	23	23	22	23	26
6	11	11	11	11	11	10	11	23	23	22	23	26
7	11	11	11	12	11	10	11	23	23	22	24	26
8	12	11	11	12	11	10	11	23	24	22	24	27
9	12	12	11	12	11	10	11	23	24	21	22	26
10	12	12	11	12	12	10	11	24	24	20	20	26
11	12	11	11	12	11	10	11	24	25	20	21	26
12	11	11	12	12	11	10	16	24	25	21	21	26
13	11	12	12	12	11	10	20	24	25	21	21	24
14	11	12	12	13	11	10	20	24	23	21	22	22
15	11	12	12	13	12	10	20	24	21	22	22	23
16	11	12	12	13	12	10	20	25	21	22	22	23
17	11	12	12	13	11	10	21	24	20	22	22	23
18	11	11	12	13	11	11	21	23	20	23	23	23
19	11	12	12	13	11	11	21	22	21	23	22	23
20	11	12	12	13	11	11	21	23	21	23	22	24
21	11	12	12	13	11	11	21	23	21	23	22	22
22	11	12	12	13	11	11	21	23	21	24	23	20
23	11	12	11	13	12	11	22	23	21	24	23	20
24	11	12	10	13	12	12	22	23	21	24	23	20
25	11	12	10	14	11	12	22	21	21	24	24	20
26	11	12	10	14	9.9	12	22	21	22	24	24	21
27	9.9	12	10	12	10	12	22	22	22	24	24	21
28	10	12	11	11	10	12	22	22	21	24	24	21
29	10	12	11	11	---	12	22	21	22	21	25	21
30	10	13	11	11	---	12	22	22	21	22	25	21
31	11	---	11	11	---	12	---	22	---	22	25	---
TOTAL	348.9	350	355	377	309.9	332	519	707	667	684	707	703
MEAN	11.3	11.7	11.5	12.2	11.1	10.7	17.3	22.8	22.2	22.1	22.8	23.4
MAX	17	13	13	14	12	12	22	25	25	24	25	27
MIN	9.9	11	10	11	9.9	10	11	21	20	20	20	20
AC-FT	692	694	704	748	615	659	1030	1400	1320	1360	1400	1390

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1993, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	15.9	13.3	13.1	12.6	12.6	13.0	22.5	25.1
MAX	34.7	15.7	14.7	14.1	14.5	15.0	25.3	27.0
(WY)	1991	1986	1986	1986	1986	1986	1988	1989
MIN	11.3	11.7	11.5	11.1	11.1	10.7	17.3	22.2
(WY)	1993	1993	1993	1990	1993	1993	1993	1993

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1986 - 1993

ANNUAL TOTAL	6703.9	6059.8		
ANNUAL MEAN	18.3	16.6		
HIGHEST ANNUAL MEAN			19.8	
LOWEST ANNUAL MEAN			23.5	1990
HIGHEST DAILY MEAN			16.6	1993
LOWEST DAILY MEAN	28	Aug 20	71	1990
ANNUAL SEVEN-DAY MINIMUM	9.9	Oct 27	8.5	Mar 28 1988
ANNUAL RUNOFF (AC-FT)	10	Oct 24	9.7	Mar 24 1988
10 PERCENT EXCEEDS	13300	10	14380	
50 PERCENT EXCEEDS	25	24	27	
90 PERCENT EXCEEDS	17	13	16	
	11	11	12	

## GREEN RIVER BASIN

81

## 09285900 STRAWBERRY RIVER AT PINNACLES NEAR FRUITLAND, UT

LOCATION.--Lat 40°07'39", long 110°44'28", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 13, T. 1 N., R. 8 E., Uintah Meridian, Duchesne County, Hydrologic Unit 14060004, on left bank 150 ft downstream from Strawberry Pinnacles and approximately 9 mi southeast of Fruitland.

DRAINAGE AREA.--372 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WDR UT-92-1: 1991.

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow is regulated by Strawberry Reservoir.

COOPERATION.--Gage-height record Oct. 1, 1989 to Feb. 7, 1990 provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 308 ft<sup>3</sup>/s May 23, 1993, gage height, 2.56 ft; minimum daily discharge, 17 ft<sup>3</sup>/s Jan. 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 308 ft<sup>3</sup>/s May 23, gage height, 2.56 ft; minimum daily discharge, 17 ft<sup>3</sup>/s Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	29	33	e28	e23	e25	32	51	227	77	55	50
2	33	30	35	e25	e25	e27	31	54	214	77	55	49
3	31	32	33	e22	e28	e28	29	58	201	74	55	49
4	31	32	29	e20	e25	e30	29	61	179	75	55	49
5	31	31	26	e17	e23	e31	32	65	162	76	57	51
6	30	30	e27	e20	e27	e32	30	66	148	70	57	50
7	30	31	e29	e23	e30	e33	29	66	143	71	58	50
8	30	31	30	e22	e32	e32	29	67	137	68	61	50
9	29	31	36	e24	e32	e33	28	67	132	66	59	51
10	28	30	37	e26	e32	e36	28	66	126	66	58	50
11	29	30	36	e24	e32	e34	28	68	120	65	58	51
12	29	30	37	e22	e30	e32	27	75	114	64	56	51
13	30	30	e36	e23	e27	e30	32	85	111	64	54	51
14	30	30	e31	e21	e24	e32	33	89	107	61	54	49
15	29	29	e25	e27	e26	e36	34	104	100	61	55	49
16	29	30	e24	e25	e26	e36	34	150	98	60	53	49
17	29	30	e26	e25	e28	e37	34	189	100	63	53	50
18	29	30	29	e27	e31	e38	33	216	98	63	53	50
19	29	30	e25	e28	e33	33	34	219	91	63	53	49
20	29	30	e19	e26	e29	33	36	242	88	63	53	49
21	28	30	e20	e29	e26	33	36	257	89	62	54	49
22	28	30	e20	e27	e27	32	37	273	87	60	52	48
23	28	30	21	e26	e29	32	38	281	85	63	52	48
24	28	31	e20	e27	e27	31	38	275	82	65	51	48
25	29	27	e19	e22	e23	31	38	276	81	64	51	48
26	30	29	e21	e23	e18	31	39	278	79	63	51	48
27	28	22	e22	e22	e21	31	39	277	79	62	50	48
28	28	28	26	e21	e24	31	42	280	79	58	50	48
29	28	33	30	e20	---	32	46	268	78	56	50	48
30	28	29	34	e19	---	33	49	253	77	57	50	48
31	29	---	e26	e19	---	32	---	243	---	55	50	---
TOTAL	914	895	862	730	758	997	1024	5019	3512	2012	1673	1478
MEAN	29.5	29.8	27.8	23.5	27.1	32.2	34.1	162	117	64.9	54.0	49.3
MAX	37	33	37	29	33	38	49	281	227	77	61	51
MIN	28	22	19	17	18	25	27	51	77	55	50	48
AC-FT	1810	1780	1710	1450	1500	1980	2030	9960	6970	3990	3320	2930

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1993, BY WATER YEAR (WY)

	1990	1991	1992	1993
MEAN	41.5	34.1	31.1	29.7
MAX	61.2	39.2	37.1	36.6
(WY)	1991	1990	1990	1992
MIN	29.5	29.8	27.8	23.5
(WY)	1993	1993	1993	1993

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1990 - 1993

ANNUAL TOTAL	12522	19874	44.0	
ANNUAL MEAN	34.2	54.4	54.4	1993
HIGHEST ANNUAL MEAN			35.1	1992
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	60	281	281	May 23 1993
LOWEST DAILY MEAN	19	17	17	Jan 5 1993
ANNUAL SEVEN-DAY MINIMUM	20	20	20	Dec 20 1992
ANNUAL RUNOFF (AC-FT)	24840	39420	31900	
10 PERCENT EXCEEDS	41	90	69	
50 PERCENT EXCEEDS	35	33	36	
90 PERCENT EXCEEDS	28	25	28	

e Estimated

## GREEN RIVER BASIN

## 09286100 RED CREEK ABOVE RESERVOIR, NEAR FRUITLAND, UT

LOCATION.--Lat 40°19'48", long 110°51'43", in SW¼, SE¼, SE¼, sec. 2, T. 2 S., R. 9 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank 2 mi above Red Creek Dam and 9.2 mi north of Fruitland.

DRAINAGE AREA.--31.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,320 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation or diversions above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 188 ft<sup>3</sup>/s, May 4, 1993, gage height, 2.95 ft from highwater mark; minimum recorded discharge, .03 ft<sup>3</sup>/s, Mar. 20, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 188 ft<sup>3</sup>/s, May 4, gage height, 2.95 ft from high water mark; minimum daily discharge, 0.78 ft<sup>3</sup>/s, Sept. 12, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.0	e1.4	e1.2	1.3	e1.5	5.8	12	29	6.7	2.4	1.6
2	1.0	2.0	e1.5	e1.3	1.3	e1.6	6.3	12	28	6.4	2.1	1.4
3	1.0	2.0	e1.2	e1.2	1.2	e1.7	5.8	18	28	5.8	2.0	1.3
4	1.0	2.7	e1.1	e1.1	e1.2	1.8	6.4	31	23	5.9	2.1	1.3
5	1.1	1.7	e1.2	e.90	e1.1	1.9	7.4	18	24	6.0	2.5	1.4
6	1.0	2.2	e1.1	e1.1	e1.2	2.2	6.2	15	23	5.6	2.2	1.2
7	.98	1.7	e1.1	e1.2	e1.2	2.2	5.7	16	19	5.2	2.2	1.3
8	1.0	e1.7	e1.3	e1.4	1.3	e2.2	5.6	14	18	4.8	3.0	1.3
9	1.1	e1.6	e1.6	e1.4	1.3	e2.2	6.5	13	16	4.5	4.2	1.2
10	1.1	e1.5	e1.7	e1.5	1.3	e2.3	7.6	16	15	4.3	3.9	1.0
11	1.1	e1.6	e1.7	e1.2	1.3	e2.2	6.8	26	14	4.1	3.6	.82
12	1.1	e1.7	e1.7	e1.3	1.3	e2.0	6.0	35	14	4.0	2.9	.78
13	1.0	1.7	e1.5	e1.3	e1.3	e2.0	5.4	38	13	3.9	2.3	.78
14	1.1	e1.8	e1.2	e1.3	e1.2	e1.3	5.4	49	13	3.8	1.9	.86
15	.97	e1.8	e1.1	e1.4	e1.2	e2.2	5.4	55	12	3.6	1.8	.92
16	1.0	1.6	e1.2	1.5	e1.2	e2.4	6.0	58	12	3.4	1.8	1.3
17	1.1	1.6	e1.4	1.4	e1.2	e2.5	7.3	56	14	3.3	1.8	1.8
18	1.2	1.4	e1.3	1.4	e1.3	e2.3	9.5	57	17	3.3	1.7	2.0
19	1.2	e1.5	e1.2	1.4	1.4	e2.3	7.1	55	14	3.1	1.9	1.9
20	1.2	e1.4	e1.1	1.3	1.4	e2.1	6.2	59	12	3.1	4.0	1.6
21	1.2	e1.5	e1.2	1.3	e1.4	e2.0	6.2	53	13	2.9	4.2	1.4
22	1.3	e1.6	e1.3	1.3	e1.3	e2.1	8.3	57	12	2.9	2.9	1.3
23	1.3	e1.6	e1.3	1.2	1.4	e2.4	11.3	51	11	2.9	2.2	1.3
24	1.3	e1.4	e1.2	1.3	1.6	e3.0	9.7	49	10	6.5	1.9	1.4
25	1.6	e1.1	e1.1	1.2	e1.5	4.6	8.7	45	9.3	4.0	1.8	1.4
26	1.7	e1.2	e1.1	e1.2	e1.3	5.5	11	45	9.1	3.5	1.9	1.4
27	1.7	e1.3	e1.1	e1.2	e1.2	7.1	14	43	8.5	3.3	2.1	1.3
28	1.9	e1.1	e1.3	e1.2	e1.4	6.6	14	39	8.0	3.0	1.8	1.4
29	2.0	e1.1	e1.6	e1.2	---	6.4	15	35	7.4	2.9	1.6	1.4
30	2.2	e1.3	e1.5	e1.1	---	5.6	14	33	7.1	3.2	1.5	1.3
31	2.3	---	e1.1	e1.1	---	5.2	---	32	---	2.7	1.5	---
TOTAL	39.75	48.4	40.4	39.00	36.3	92.0	240.3	1131	453.4	129.6	73.7	39.36
MEAN	1.28	1.61	1.30	1.26	1.30	2.97	8.01	36.5	15.1	4.18	2.38	1.31
MAX	2.3	2.7	1.7	1.5	1.6	7.1	15	59	29	6.7	4.2	2.0
MIN	.97	1.1	1.1	.90	1.1	1.5	5.4	12	7.1	2.7	1.5	.78
AC-FT	79	96	80	77	72	182	477	2240	899	257	146	78

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1993, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993
MEAN	1.95	2.28	2.07	1.88	2.25	3.91	8.85
MAX	4.29	4.00	3.50	2.59	3.30	6.83	15.0
(WY)	1987	1987	1987	1990	1991	1989	1993
MIN	1.28	1.39	1.30	1.17	1.30	2.97	4.53
(WY)	1993	1989	1993	1989	1993	1993	1992

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1987 - 1993

ANNUAL TOTAL	722.40	2363.21	3.99
ANNUAL MEAN	1.97	6.47	6.47
HIGHEST ANNUAL MEAN			2.08
LOWEST ANNUAL MEAN			70
HIGHEST DAILY MEAN	7.0	May 9	May 20
LOWEST DAILY MEAN	.12	Aug 4	Sep 12
ANNUAL SEVEN-DAY MINIMUM	.16	Jul 29	Sep 9
ANNUAL RUNOFF (AC-FT)	1430	4690	2890
10 PERCENT EXCEEDS	4.2	15	9.2
50 PERCENT EXCEEDS	1.6	1.8	2.2
90 PERCENT EXCEEDS	.43	1.1	1.0

e Estimated

## GREEN RIVER BASIN

83

09286700 CURRANT CREEK BELOW CURRANT CREEK DAM, NEAR FRUITLAND, UT

LOCATION.--Lat 40°19'51", long 111°02'56", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 6, T. 2 S., R. 10 W., Uintah Meridian, Wasatch County, Hydrologic Unit 14060004, on left bank 700 ft below Currant Creek Dam, 1.0 mi above Red Ledge Hollow, and 14 mi northwest of Fruitland.

DRAINAGE AREA.--48.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,550 ft above sea level from topographic map.

REMARKS.--Records good. No estimated daily discharges. Flow regulated by Currant Creek Reservoir, total capacity, 15,670 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 558 ft<sup>3</sup>/s May 14, 1984, gage height, 5.58 ft; minimum daily, 0.63 ft<sup>3</sup>/s April 10, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 110 ft<sup>3</sup>/s May 21-23; minimum daily discharge, 9.7 ft<sup>3</sup>/s Oct. 10, 11, Jan. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	10	10	10	11	11	11	16	47	16	17	17
2	11	11	10	9.9	11	11	11	16	47	16	17	17
3	11	10	10	9.9	11	11	11	16	32	16	17	17
4	11	10	10	9.9	11	11	11	16	15	16	17	17
5	11	10	10	9.9	11	11	11	16	15	16	17	17
6	11	10	9.9	9.9	11	11	11	16	15	16	17	17
7	11	11	9.9	9.7	11	11	10	16	15	16	17	17
8	11	11	9.9	10	11	11	10	16	15	16	17	17
9	10	11	10	10	11	11	11	16	15	16	17	17
10	9.7	11	10	10	11	11	11	16	15	16	17	17
11	9.7	11	10	11	11	11	11	16	15	16	17	17
12	10	11	10	10	11	11	14	16	15	16	17	17
13	10	11	10	10	11	11	17	16	15	16	17	17
14	10	10	10	10	10	11	17	16	15	16	17	16
15	10	10	10	10	10	11	17	16	15	16	17	16
16	10	9.9	10	11	10	11	17	16	15	16	17	16
17	10	9.9	10	11	10	11	17	16	15	16	17	16
18	10	9.9	10	11	10	12	17	16	15	16	17	16
19	10	9.9	10	11	10	12	16	16	15	16	17	16
20	9.8	9.9	10	11	11	12	16	65	16	16	17	16
21	10	9.9	10	11	10	12	16	110	16	16	17	16
22	10	10	10	11	10	12	16	110	16	17	17	16
23	10	10	10	11	10	12	16	110	15	17	17	16
24	10	10	10	11	10	12	16	95	16	17	17	16
25	10	9.9	10	11	10	12	16	30	16	17	17	16
26	10	9.9	10	11	10	12	16	17	16	17	17	16
27	10	9.9	10	11	10	12	16	20	16	17	17	17
28	10	9.9	10	11	10	12	16	20	16	17	17	17
29	10	10	10	11	---	12	16	20	16	17	17	17
30	10	10	10	11	---	11	16	21	16	17	17	14
31	10	---	10	11	---	11	---	33	---	17	17	---
TOTAL	320.2	307.0	309.7	326.2	294	353	427	955	541	506	527	494
MEAN	10.3	10.2	9.99	10.5	10.5	11.4	14.2	30.8	18.0	16.3	17.0	16.5
MAX	14	11	10	11	11	12	17	110	47	17	17	17
MIN	9.7	9.9	9.9	9.7	10	11	10	16	15	16	17	14
AC-FT	635	609	614	647	583	700	847	1890	1070	1000	1050	980

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1993, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	9.43	9.58	10.5	9.94	9.55	9.28	24.5	48.9	33.7	19.2
MAX	17.4	18.9	19.7	17.3	14.6	12.1	59.4	297	154	42.1
(WY)	1984	1984	1985	1985	1985	1984	1985	1984	1984	1984
MIN	4.20	5.63	6.78	6.22	6.24	7.33	14.2	17.0	16.8	12.2
(WY)	1985	1985	1989	1989	1989	1988	1993	1992	1992	1986

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1984 - 1993

ANNUAL TOTAL	4899.1	5360.1	17.9	
ANNUAL MEAN	13.4	14.7	55.8	1984
HIGHEST ANNUAL MEAN			11.1	1986
LOWEST ANNUAL MEAN			549	May 21 1984
HIGHEST DAILY MEAN	18	Aug 28		May 21 1984
LOWEST DAILY MEAN	8.5	Feb 28	9.7	Oct 10 1985
ANNUAL SEVEN-DAY MINIMUM	8.7	Feb 25	9.9	Jan 1 1984
ANNUAL RUNOFF (AC-FT)	9720	10630	12960	
10 PERCENT EXCEEDS	17	17	22	
50 PERCENT EXCEEDS	13	12	11	
90 PERCENT EXCEEDS	9.2	10	6.9	

## GREEN RIVER BASIN

09288000 CURRANT CREEK NEAR FRUITLAND, UT

LOCATION.--Lat 40°12'01", long 110°54'25", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 21, T. 3 S., R. 9 W., Uintah Meridian, Wasatch County, Hydrologic Unit 14060004, on left bank 30 ft downstream from Deep Creek, 150 ft upstream from bridge on U.S. Highway 40 and 3.5 mi southwest of Fruitland.

DRAINAGE AREA.--140 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 6,670 ft above sea level, from topographic map. Aug. 6, 1952 to Nov. 8, 1966, water-stage recorder at site 150 ft downstream at datum 1.30 ft lower. See WSP 1733 for history of changes prior to Aug. 6, 1952.

REMARKS.--Records good except for estimated daily discharges, which are fair. Currant Creek feeder canal, constructed by the Bureau of Reclamation in 1936, diverts water from headwaters of Currant Creek to Strawberry Reservoir, from which it is diverted through Strawberry Tunnel to the Great Basin for irrigation in Strawberry Valley project. Beginning in 1962, Deep Creek was diverted intermittently into private fish ponds and entered Currant Creek 400 ft below gage. However, since approximately 1976 when the upstream pond washed out Deep Creek has been entering Currant Creek 30 ft above gage. Flow partially regulated by Currant Creek Reservoir 15 miles upstream, beginning Oct. 4, 1982. Total capacity, 15,670 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,260 ft<sup>3</sup>/s May 4, 1952, gage height, 2.72 ft, site and datum then in use; maximum gage height, 5.92 ft, Jan. 27, 1974, backwater from ice; minimum recorded, 3.6 ft<sup>3</sup>/s Aug. 9, 10, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 152 ft<sup>3</sup>/s May 21, gage height, 2.12 ft; minimum daily discharge, 18 ft<sup>3</sup>/s Feb. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	30	27	31	27	24	37	41	67	36	35	35
2	27	34	26	31	26	25	37	41	71	36	35	36
3	25	31	e27	28	e25	24	36	42	73	37	34	35
4	25	30	e22	27	e24	24	37	46	51	37	36	36
5	24	30	24	e27	e25	26	41	46	49	36	37	36
6	23	29	e28	e27	27	27	37	45	49	35	36	37
7	24	29	e28	27	29	27	35	46	48	34	38	37
8	24	30	27	27	27	28	35	44	47	35	43	35
9	24	29	28	27	27	29	36	43	47	35	43	33
10	26	26	27	27	27	29	37	43	46	35	42	32
11	26	24	27	26	26	29	36	45	46	34	42	32
12	26	25	26	e27	e27	28	36	48	45	34	39	33
13	25	26	e27	27	19	28	38	52	43	34	37	35
14	25	25	23	28	18	28	39	57	42	34	36	36
15	26	26	27	28	21	30	39	58	42	33	36	36
16	26	25	23	28	26	31	40	62	42	33	34	37
17	27	25	25	27	27	33	40	61	49	33	32	39
18	27	25	28	27	e27	38	44	60	47	33	33	38
19	27	25	24	27	28	36	42	55	45	33	34	38
20	27	25	24	25	26	36	40	68	44	33	37	38
21	27	e25	28	28	e26	35	40	145	45	33	39	36
22	27	25	28	27	27	34	41	145	44	34	36	35
23	27	26	29	e27	26	35	42	144	42	36	34	35
24	28	e23	26	e27	25	37	41	139	42	39	32	35
25	30	20	26	e27	24	39	40	80	41	38	32	35
26	29	22	25	e27	e19	40	41	53	40	38	33	35
27	27	24	27	e27	27	43	41	54	39	36	33	35
28	30	28	29	e27	25	42	41	54	38	36	34	35
29	30	25	29	27	---	42	41	52	36	36	33	36
30	34	22	30	e27	---	40	41	51	36	37	33	36
31	32	---	26	28	---	37	---	51	---	35	34	---
TOTAL	834	789	821	848	708	1004	1171	1971	1396	1088	1112	1067
MEAN	26.9	26.3	26.5	27.4	25.3	32.4	39.0	63.6	46.5	35.1	35.9	35.6
MAX	34	34	30	31	29	43	44	145	73	39	43	39
MIN	23	20	22	25	18	24	35	41	36	33	32	32
AC-FT	1650	1560	1630	1680	1400	1990	2320	3910	2770	2160	2210	2120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1993, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	30.7	30.8	29.1	29.7	31.6	36.1	46.5	52.9
MAX	47.2	44.0	39.4	38.3	45.4	60.7	84.2	117
(WY)	1987	1988	1989	1990	1991	1992	1993	1994
MIN	25.7	24.9	22.7	23.2	24.3	26.9	31.6	27.5
(WY)	1989	1991	1992	1993	1994	1995	1996	1997

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1986 - 1993

ANNUAL TOTAL	9650	12809	35.9	
ANNUAL MEAN	26.4	35.1	58.5	1986
HIGHEST ANNUAL MEAN			26.1	1992
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	34	Oct 30	145	May 21
LOWEST DAILY MEAN	19	Jan 2	18	Feb 14
ANNUAL SEVEN-DAY MINIMUM	22	Jan 15	23	Nov 24
ANNUAL RUNOFF (AC-FT)	19140	25410	26030	
10 PERCENT EXCEEDS	30	45	48	
50 PERCENT EXCEEDS	26	33	32	
90 PERCENT EXCEEDS	23	25	25	

e Estimated

## GREEN RIVER BASIN

85

## 09288180 STRAWBERRY RIVER NEAR DUCHESNE, UT

LOCATION.--Lat 40°09'17", long 110°33'15", in SE1/4SW1/4, sec. 3, T. 4 S., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on right bank 150 ft downstream from County Road bridge, 2,000 ft upstream from maximum high-water line of Starvation Reservoir, and 7.9 mi west of Duchesne.

DRAINAGE AREA.--917 mi<sup>2</sup> (includes approximately 170 mi<sup>2</sup> tributary to Strawberry Reservoir).

PERIOD OF RECORD.--May 1968 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,722 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Strawberry Reservoir since July 14, 1912. Capacity, 1,106,500 acre-ft since June 30, 1973; 283,000 acre-ft prior to June 30, 1973. New earthfilled dam located 7 mi below old dam was completed in September 1972 and storage began June 30, 1973. The elevation of new reservoir reached the elevation of the old reservoir on March 15 and the old dam was breached on June 6, 1985. Water Hollow Tunnel will divert 600 ft<sup>3</sup>/s to the reservoir during spring runoff when series of tunnels and small reservoirs are completed on Rock Creek, West Fork Duchesne River, and Currant Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,090 ft<sup>3</sup>/s May 31, 1983, gage height, 8.29 ft; maximum gage height, 10.16 ft Jan. 2, 1983, result of an ice jam; minimum recorded, 17 ft<sup>3</sup>/s June 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 727 ft<sup>3</sup>/s May 23, gage height 7.19 ft; minimum daily discharge, 40 ft<sup>3</sup>/s Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	79	e75	e56	e56	e68	139	183	402	119	84	85
2	84	83	e80	e58	e62	e76	141	183	398	116	84	85
3	77	85	e65	e58	e64	e79	134	185	402	113	82	85
4	74	75	e52	e49	e61	e84	133	196	358	111	84	86
5	76	73	e58	e40	e54	e92	157	227	315	112	86	86
6	73	72	e56	e48	e56	e100	149	226	284	111	85	94
7	72	73	e61	e50	e63	e100	137	222	274	111	86	88
8	73	72	e68	e55	e68	e102	133	212	260	114	99	87
9	72	72	e64	e59	e76	e109	131	204	245	110	107	84
10	71	72	e63	e56	e75	128	133	193	230	104	117	83
11	72	73	e66	e51	e75	107	130	191	220	101	121	82
12	72	76	e63	e49	e74	100	128	200	212	102	106	81
13	71	72	e57	e53	e65	94	130	231	200	101	96	80
14	72	70	e56	e54	e54	92	132	274	188	102	91	81
15	71	70	e50	e62	e59	105	131	333	173	100	90	84
16	72	70	e54	e64	e59	114	131	406	165	96	89	83
17	72	70	e62	e67	e59	119	132	521	175	95	85	91
18	72	70	e56	e73	e68	162	136	552	194	95	85	89
19	72	69	e52	e65	e79	148	142	567	216	93	88	91
20	71	69	e50	e62	e72	140	137	573	168	92	89	90
21	69	68	e55	e67	e63	142	137	662	167	90	95	89
22	71	69	e57	e70	e68	131	139	682	172	90	90	88
23	71	e68	e58	e61	e69	130	143	690	158	95	86	88
24	71	e62	e53	e62	e65	134	147	657	156	107	85	89
25	72	e59	e51	e53	e57	141	148	617	153	96	84	88
26	75	e63	e54	e57	e51	149	150	543	144	96	87	88
27	74	e70	e51	e53	e57	160	155	504	139	92	85	88
28	74	e75	e59	e52	e63	155	159	507	131	90	85	86
29	79	e65	e68	e51	---	166	169	481	127	91	84	87
30	78	e69	e64	e45	---	161	179	445	124	93	82	89
31	94	---	e55	e55	---	147	---	418	---	85	83	---
TOTAL	2307	2133	1833	1755	1792	3735	4242	12085	6550	3123	2800	2595
MEAN	74.4	71.1	59.1	56.6	64.0	120	141	390	218	101	90.3	86.5
MAX	94	85	80	73	79	166	179	690	402	119	121	94
MIN	69	59	50	40	51	68	128	183	124	85	82	80
AC-FT	4580	4230	3640	3480	3550	7410	8410	23970	12990	6190	5550	5150

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1993, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	136	106	113	115	123	123	178	327	225	147
MAX	378	243	372	362	336	238	360	1031	777	494
(WY)	1984	1984	1984	1984	1984	1984	1984	1984	1984	1984
MIN	72.5	71.0	59.1	56.6	64.0	77.3	81.9	85.5	74.2	75.1
(WY)	1992	1990	1993	1993	1993	1991	1992	1992	1992	1988

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1984 - 1993

ANNUAL TOTAL	27737	44950	154
ANNUAL MEAN	75.8	123	443
HIGHEST ANNUAL MEAN			76.9
LOWEST ANNUAL MEAN			1984
HIGHEST DAILY MEAN	124	690	1640
LOWEST DAILY MEAN	50	40	35
ANNUAL SEVEN-DAY MINIMUM	54	51	51
ANNUAL RUNOFF (AC-FT)	55020	89160	111700
10 PERCENT EXCEEDS	90	207	352
50 PERCENT EXCEEDS	75	86	100
90 PERCENT EXCEEDS	63	57	70

e Estimated



## GREEN RIVER BASIN

## 09288395 STARVATION RESERVOIR NEAR DUCHESNE, UT

LOCATION.--Lat 40°11'27", long 110°26'33", in NW¼, NE¼, SW¼, sec. 27, T. 3 S., R. 5 W., Uinta special base and meridian, Duchesne County, Hydrologic Unit 14060004, 2.8 mi northwest of Duchesne.

DRAINAGE AREA.--1,058 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1989 to current year.

GAGE.--Water-stage recorder equipped with satellite transmission. Datum of gage is 5,624.8 ft above sea level, (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill rock-faced dam; active storage began Oct. 13, 1969. Active capacity, 152,310 acre-ft at elevation 5,712.00 ft above mean sea level. Dead storage, 15,000 acre-ft between elevation 5,565.0 ft (streambed at dam axis) and 5,624.8 ft (top of dead storage). Figures given herein represent active contents. Water is used for irrigation, fish and wildlife propagation along Strawberry River, and municipal and industrial use in Duchesne County.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 154,600 acre-ft, June 14-16, 1993, elevation, 5,712.69 ft; minimum contents, 59,220 acre-ft Sept. 27, 28, 1990, elevation 5,674.89 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 154,600 acre-ft, June 14-16, elevation, 5,712.69 ft; minimum contents, 62,870 acre-ft Oct. 13, elevation 5,676.84 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,675	59,420	5,700	115,910
5,680	68,990	5,705	130,250
5,685	79,400	5,710	145,780
5,690	90,610	5,715	162,420
5,695	102,730		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64540	68610	78980	88210	99070	109500	125900	138700	151100	154400	137900	125600
2	64320	69010	79350	88550	99450	109800	126500	138900	151800	154400	137100	125100
3	64080	69440	79710	88900	99830	110200	127000	138900	152400	154300	136500	124600
4	63840	69840	80010	89180	100200	110500	127500	138900	153200	154200	135900	124100
5	63640	70200	80280	89430	100500	110900	128200	139100	153800	154100	135300	123700
6	63510	70590	80540	89710	100800	111200	128900	139200	154200	153900	134800	123400
7	63340	70960	80800	90010	101100	111600	129400	139300	154300	153700	134400	123000
8	63220	71360	81090	90390	101500	112000	129900	139300	154300	153500	133900	122600
9	63100	71730	81430	90760	101900	112400	130400	139200	154300	153100	133600	122200
10	62960	72090	81830	91190	102300	112800	130900	139200	154400	152500	133400	121800
11	62900	72410	82200	91610	102700	113300	131500	139200	154400	151700	133400	121400
12	62880	72740	82590	91980	103100	113700	132000	139100	154400	151100	133300	120900
13	62870	73100	82930	92290	103500	114100	132500	139100	154300	150600	133000	120400
14	62880	73460	83180	92640	103800	114500	133000	139100	154400	149900	132700	120000
15	62910	73820	83410	93020	104100	114900	133500	139200	154600	149300	132400	119600
16	62970	74190	83670	93400	104400	115400	134100	139500	154500	148600	132100	119300
17	63200	74550	83890	93790	104700	115900	134500	140000	154200	147900	131700	119100
18	63490	74910	84160	94190	105100	116700	135000	140700	154100	147100	131300	118900
19	63790	75280	84420	94610	105600	117400	135500	141400	154100	146400	131000	118700
20	64080	75640	84630	95000	106000	118100	135800	142200	154000	145700	130600	118600
21	64390	75970	84860	95370	106500	118700	136200	143100	153900	145000	130300	118500
22	64710	76320	85110	95780	106800	119300	136600	144300	154000	144200	129900	118400
23	65040	76660	85430	96150	107200	119800	136900	145300	154200	143500	129500	118200
24	65360	76980	85720	96440	107700	120300	137300	146300	154300	142800	129100	118100
25	65740	77280	86010	96740	108100	120900	137700	147200	154200	142200	128700	117900
26	66140	77530	86320	97080	108400	121500	138000	147900	154200	141600	128300	117700
27	66500	77740	86610	97410	108700	122300	138300	148500	154200	140900	127800	117600
28	66860	78040	86920	97740	109100	123000	138400	149100	154200	140300	127400	117400
29	67270	78390	87230	98030	---	124000	138500	149700	154300	139700	126900	117300
30	67700	78690	87570	98360	---	124800	138600	150200	154400	139100	126400	117100
31	68210	---	87900	98700	---	125400	---	150600	---	138500	126000	---
MAX	68210	78690	87900	98700	109100	125400	138600	150600	154600	154400	137900	125600
MIN	62870	68610	78980	88210	99070	109500	125900	138700	151100	138500	126000	117100
(#)	5679.6	5684.7	5688.8	5693.4	5697.5	5703.3	5707.7	5711.5	5712.6	5707.7	5703.6	5700.4
(*)	+3430	+10480	---	+10800	+10400	+16300	+13200	+12000	+3800	-15900	-12500	-8900

CAL YR 1992 . . . . . (\*) -19400

WTR YR 1993 . . . . . (\*) +52320

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.  
(e) Estimated

## GREEN RIVER BASIN

87

09288400 STRAWBERRY RIVER BELOW STARVATION RESERVOIR NEAR DUCHESNE, UT

LOCATION.--Lat 40°10'26", long 110°25'44", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> of sec. 34, T. 3 S., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060004, on right bank, 1.4 mi downstream of Starvation Dam and 1.6 mi northwest of Duchesne.

DRAINAGE AREA.--1,059 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,540 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Starvation Reservoir (see station 09288395).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 536 ft<sup>3</sup>/s on June 15, 1993, gage height 7.32 ft; minimum daily discharge 10 ft<sup>3</sup>/s several days during January and February, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 536 ft<sup>3</sup>/s June 15, gage height 7.32 ft; minimum daily discharge, 13 ft<sup>3</sup>/s, Feb. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	31	17	e15	14	17	17	115	206	458	e425	333
2	180	30	17	e15	14	17	17	121	206	453	e429	334
3	181	29	e17	e15	14	18	17	174	182	e433	392	357
4	183	28	e17	e14	e13	18	18	185	145	e390	389	345
5	164	27	e17	e14	e15	19	18	186	265	e347	390	345
6	146	27	e17	e14	e15	18	17	186	363	301	393	340
7	147	26	e17	e14	16	19	18	195	406	239	394	334
8	150	26	e17	e14	16	18	19	208	421	280	390	322
9	152	25	e17	14	16	19	21	210	428	397	386	322
10	144	24	e17	e14	16	19	18	214	428	430	340	326
11	124	24	e17	14	16	19	17	216	428	483	319	312
12	112	21	e17	e14	16	19	16	253	432	480	e311	308
13	102	19	e16	14	16	18	17	274	410	480	e313	303
14	88	18	e16	15	e15	19	17	284	448	465	e318	302
15	68	15	e16	15	e15	19	17	284	525	379	e320	306
16	29	17	e16	15	15	20	17	285	494	460	e322	286
17	29	17	e16	15	14	19	18	284	396	459	e324	266
18	29	17	e16	15	14	17	17	285	371	459	e324	247
19	33	17	e16	15	15	16	17	287	346	458	e324	228
20	29	17	e17	16	16	16	21	200	317	458	322	218
21	23	15	e17	16	15	16	26	101	302	469	326	206
22	24	16	e17	16	15	17	27	100	313	478	328	207
23	25	16	e17	e16	16	17	26	101	398	497	333	207
24	27	16	e17	16	16	17	27	147	443	511	344	206
25	28	16	e17	15	15	17	36	203	397	511	351	204
26	29	16	e17	e15	e15	17	102	205	397	496	337	204
27	30	17	e17	e15	16	17	113	202	384	451	338	203
28	31	17	16	e15	16	17	113	203	375	422	339	204
29	31	17	15	e15	---	17	115	204	425	e420	337	204
30	30	17	15	e14	---	18	114	205	450	e420	337	180
31	30	---	e15	14	---	17	---	207	---	e422	336	---
TOTAL	2579	618	513	458	425	551	1053	6324	11101	13406	10831	8159
MEAN	83.2	20.6	16.5	14.8	15.2	17.8	35.1	204	370	432	349	272
MAX	183	31	17	16	16	20	115	287	525	511	429	357
MIN	23	15	15	14	13	16	16	100	145	239	311	180
AC-FT	5120	1230	1020	908	843	1090	2090	12540	22020	26590	21480	16180

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1993, BY WATER YEAR (WY)

MEAN	92.5	18.1	15.9	13.6	15.2	16.9	120	311	326	374	328	234
MAX	147	20.6	16.5	15.4	19.8	19.5	185	404	398	432	349	272
(WY)	1992	1993	1993	1992	1992	1991	1992	1990	1992	1993	1993	1993
MIN	65.9	15.7	14.9	11.4	11.6	13.0	35.1	204	195	281	301	194
(WY)	1990	1990	1990	1990	1990	1990	1993	1993	1991	1992	1990	1991

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1990 - 1993

ANNUAL TOTAL	60597	56018	156									
ANNUAL MEAN	166	153	171									
HIGHEST ANNUAL MEAN			136									1992
LOWEST ANNUAL MEAN												1991
HIGHEST DAILY MEAN	439	May 19	525	Jun 15								1993
LOWEST DAILY MEAN	14	Jan 10	13	Feb 4								1990
ANNUAL SEVEN-DAY MINIMUM	15	Jan 9	14	Jan 4								1990
ANNUAL RUNOFF (AC-FT)	120200		111100									
10 PERCENT EXCEEDS	393		420									
50 PERCENT EXCEEDS	95		29									
90 PERCENT EXCEEDS	15		15									

e Estimated

## GREEN RIVER BASIN

09289500 LAKE FORK RIVER ABOVE MOON LAKE, NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°36'24", long 110°31'35", in SW¼, SE¼, SE¼, sec. 35, T. 3 N., R. 6 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 2,000 ft upstream from head of Moon Lake at maximum stage, 2 mi upstream from Brown Duck Creek, 16 mi northeast of Mountain Home.

DRAINAGE AREA.--77.9 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1933 to September 1934 (published as West Fork of Lake Fork above Moon Lake, near Mountain Home); July 1942 to September 1955; October 1963 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,180 ft above sea level, from topographic map. April 1933 to September 1934, at site 2.5 mi upstream at different datum. July 13, 1942 to Oct. 1, 1984, at datum 1.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft<sup>3</sup>/s June 26, 1944, gage height, 5.27 ft, datum then in use, from rating curve extended above 700 ft<sup>3</sup>/s; minimum daily discharge, 12 ft<sup>3</sup>/s Apr. 7, 8, 13-15, 1933.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 26	2200	*2,370	*5.37	June 16	0100	2,330	5.33

Minimum daily discharge, 12 ft<sup>3</sup>/s, Apr. 7, 8, 13-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	32	e16	e14	e15	e15	e13	44	1850	647	180	60
2	30	32	e17	e16	e16	e15	e14	46	1630	736	162	56
3	30	32	e16	e14	e16	e15	e13	50	1100	648	149	54
4	30	35	e16	e13	e15	e15	e13	59	755	428	150	53
5	30	33	e14	e13	e14	e15	e14	52	615	319	143	54
6	30	32	e15	e14	e13	e16	e13	48	521	286	135	53
7	30	31	e15	e17	e13	e16	e12	46	425	275	126	53
8	30	31	e15	e18	e14	e16	e12	46	373	271	137	51
9	31	30	e15	e18	e15	e16	e14	44	380	257	142	49
10	30	e25	e16	e17	e16	e17	e13	50	491	268	135	46
11	30	e24	e17	e15	e15	e17	e13	70	709	275	163	45
12	29	e24	e18	e13	e14	e15	e13	103	955	270	165	44
13	29	e24	e16	e14	e14	e16	e12	140	1020	252	120	44
14	29	e25	e14	e16	e13	e17	e12	182	1330	230	106	44
15	28	24	e16	e16	e13	e17	e12	241	1780	212	103	43
16	28	22	e14	e17	e13	e16	e13	312	1770	196	94	46
17	28	20	e14	e17	e14	e16	e13	361	1370	177	87	52
18	28	19	e16	e16	e15	e16	e14	429	989	163	82	60
19	28	19	e14	e16	e16	e16	e14	519	1090	155	91	54
20	28	e18	e14	e16	e16	e16	e14	590	1440	148	96	48
21	28	e18	e14	e16	e14	e17	e14	683	1540	141	124	44
22	28	e17	e14	e14	e14	e16	e15	785	1250	139	93	42
23	29	e17	e15	e13	e15	e16	17	799	969	240	83	42
24	28	e16	e14	e13	e16	e16	17	925	710	307	78	41
25	31	e16	e13	e13	e16	e15	18	1140	762	240	75	40
26	31	e15	e13	e13	e16	e15	29	1710	926	280	76	39
27	31	e16	e13	e13	e16	e16	42	1950	934	208	72	38
28	35	e18	e16	e13	e16	e15	47	1700	969	168	69	38
29	36	e17	e16	e13	---	e14	51	1630	883	174	64	37
30	36	e15	e15	e13	---	e13	48	1710	709	238	62	36
31	34	---	e13	e14	---	e13	---	1890	---	203	60	---
TOTAL	933	697	464	458	413	484	559	18354	30245	8551	3422	1406
MEAN	30.1	23.2	15.0	14.8	14.7	15.6	18.6	592	1008	276	110	46.9
MAX	36	35	18	18	16	17	51	1950	1850	736	180	60
MIN	28	15	13	13	13	13	12	44	373	139	60	36
AC-FT	1850	1380	920	908	819	960	1110	36410	59990	16960	6790	2790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1993, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
MEAN	51.8	38.9	30.8	26.3	24.2	24.4	40.7	250	527	210	95.9	66.7																			
MAX	142	80.1	61.3	40.1	39.5	46.5	89.5	592	1008	598	212	137																			
(WY)	1983	1983	1983	1983	1988	1988	1969	1993	1993	1965	1965	1965																			
MIN	26.3	22.9	15.0	14.8	14.7	15.0	18.6	65.9	186	65.2	46.5	32.1																			
(WY)	1989	1980	1993	1993	1993	1993	1977	1993	1992	1988	1988	1988																			

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1964 - 1993

ANNUAL TOTAL	26835	65986	
ANNUAL MEAN	73.3	181	
HIGHEST ANNUAL MEAN			116
LOWEST ANNUAL MEAN			181
HIGHEST DAILY MEAN	694	1950	60.4
LOWEST DAILY MEAN	13	12	12
ANNUAL SEVEN-DAY MINIMUM	14	13	13
ANNUAL RUNOFF (AC-FT)	53230	130900	83840
10 PERCENT EXCEEDS	210	662	294
50 PERCENT EXCEEDS	30	30	43
90 PERCENT EXCEEDS	17	14	22

e Estimated

## GREEN RIVER BASIN

89

## 09290500 MOON LAKE RESERVOIR NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°33'43", long 110°29'21", in NW¼, NE¼, NE¼, sec. 19, T. 2 N., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, at dam on Lake Fork River, 1.4 mi downstream from Brown Duck Creek, 10.5 mi upstream from Yellowstone River, and 12.5 mi northwest of Mountain Home.

DRAINAGE AREA.--108 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1937 to current year.

REVISED RECORDS.--WDR UT-77-1: 1975.

GAGE.--Nonrecording gage read once daily on days shown. Datum of gage is 8064.16 ft above sea level, (levels by Bureau of Reclamation).

REMARKS.--Reservoir formed by earthfill, rock-faced dam with concrete core. Storage began Dec. 9, 1937. Capacity, 35,760 acre-ft between elevations 8,072.00 ft, crest of original outlet of lake, about 2,000 ft upstream from dam, and 8,137.00 ft, top of spillway gates. Elevation of spillway crest is 8,121.00 ft and elevation of sill of outlet works is 8,064.16 ft. Dead storage between sill of outlet and crest of original outlet of lake, 2,050 acre-ft. Total dead storage, 13,740 acre-ft. Figures given herein represent usable contents. Water is used for irrigation on lands under Moon Lake Water Users Association and Uintah Indian Irrigation projects.

COOPERATION.--Capacity table provided by Bureau of Reclamation. Gage heights furnished by Moon Lake Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 37,560 acre-ft July 10, 11, 1950; elevation, 8,139.30 ft; minimum observed, 226 acre-ft Sept. 30, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 35,760 acre-ft July 2, elevation, 8,137.0 ft; minimum contents observed, 4,120 acre-ft Oct. 1, elevation, 8,084.5 ft.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Oct. 31	--	*5,240	+1,200
Nov. 30	--	*6,810	+1,570
Dec. 31	--	*8,740	+1,930
CAL YR 1992	--	--	-10,160
Jan. 31	--	*9,850	+1,110
Feb. 28	--	*10,780	+930
Mar. 31	--	*11,840	+1,060
Apr. 30	--	*14,560	+2,720
May 31	--	*17,430	+2,870
June 30	--	*34,230	+16,800
July 31	--	*31,000	-3,230
Aug. 31	--	*21,370	-9,630
Sept. 30	--	*13,710	-7,660
WTR YR 1993	--	--	+9,670

\* No gage reading, contents interpolated.  
Readings normally made on the first of each month.

## GREEN RIVER BASIN

## 09291000 LAKE FORK RIVER BELOW MOON LAKE, NEAR MOUNTAIN HOME, UT

LOCATION.--Lat 40°33'23", long 110°29'02", in SW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 20, T. 2 N., R. 5 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Ashley National Forest, on right bank 2,000 ft downstream from Moon Lake Dam, 2 mi downstream from Brown Duck Creek, and 12 mi northwest of Mountain Home.

DRAINAGE AREA.--112 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1921 to September 1934 (fragmentary), April 1942 to current year. Published as West Fork of Lake Fork near Mountain Home 1921-34, and as Lake Fork below Moon Lake, near Mountain Home 1942-65.

REVISED RECORDS.--WSP 1313: 1930 (M). WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,970 ft above sea level by barometer. Prior to April 1942, at damsite 2,000 ft upstream at different datum.

REMARKS.--Records good. Flow regulated by Moon Lake Reservoir (see station 09290500). No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 2,180 ft<sup>3</sup>/s June 19, 1949 (gage height, 4.83 ft), from rating curve extended above 860 ft<sup>3</sup>/s; maximum gage height, 5.46 ft June 26, 1944; no flow at times when reservoir gates are closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 733 ft<sup>3</sup>/s June 29, gage height, 3.38 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	198	247	396	275	348
2	.00	.00	.00	.00	.00	.00	.00	238	251	413	288	346
3	.00	.00	.00	.00	.00	.00	.00	315	254	486	310	343
4	.00	.00	.00	.00	.00	.00	.00	379	256	309	295	342
5	.00	.00	.00	.00	.00	.00	.00	387	255	239	299	341
6	.00	.00	.00	.00	.00	.00	.00	384	257	246	377	350
7	.00	.00	.00	.00	.00	.00	.00	387	258	271	373	361
8	.00	.00	.00	.00	.00	.00	.00	397	257	287	370	357
9	.00	.00	.00	.00	.00	.00	.00	391	257	266	272	354
10	.00	.00	.00	.00	.00	.00	.00	387	257	253	76	351
11	.00	.00	.00	.00	.00	.00	.00	379	252	244	27	348
12	.00	.00	.00	.00	.00	.00	.00	375	244	256	27	346
13	.00	.00	.00	.00	.00	.00	.00	371	246	306	29	279
14	.00	.00	.00	.00	.00	.00	.00	368	249	301	29	244
15	.00	.00	.00	.00	.00	.00	.00	367	253	315	29	242
16	.00	.00	.00	.00	.00	.00	.00	367	256	323	140	243
17	.00	.00	.00	.00	.00	.00	.00	399	257	320	305	241
18	24	.00	.00	.00	.00	.00	.00	369	260	318	464	237
19	116	.00	.00	.00	.00	.00	.00	281	262	326	462	202
20	109	.00	.00	.00	.00	.00	.00	242	264	326	417	39
21	105	.00	.00	.00	.00	.00	.00	220	262	328	359	17
22	80	.00	.00	.00	.00	.00	2.8	204	262	346	357	.39
23	.00	.00	.00	.00	.00	.00	3.6	206	255	344	350	.00
24	.00	.00	.00	.00	.00	.00	4.5	209	245	341	345	.00
25	.00	.00	.00	.00	.00	.00	10	212	380	340	340	.00
26	.00	.00	.00	.00	.00	.00	78	223	627	337	333	.00
27	.00	.00	.00	.00	.00	.00	98	231	565	335	329	.00
28	.00	.00	.00	.00	.00	.00	77	235	596	332	329	.00
29	.00	.00	.00	.00	---	.00	87	238	540	328	329	.00
30	.00	.00	.00	.00	---	.00	112	239	529	313	336	.00
31	.00	---	.00	.00	---	.00	---	244	---	275	351	---
TOTAL	434.00	0.00	0.00	0.00	0.00	0.00	472.90	9442	9353	9820	8622	5931.39
MEAN	14.0	.0000	.0000	.0000	.0000	.0000	15.8	305	312	317	278	198
MAX	116	.00	.00	.00	.00	.00	112	399	627	486	464	361
MIN	.00	.00	.00	.00	.00	.00	.00	198	244	239	27	.00
AC-FT	861	.00	.00	.00	.00	.00	938	18730	18550	19480	17100	11760

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1993, BY WATER YEAR (WY)

MEAN	51.4	7.86	1.05	1.56	2.44	3.26	48.8	297	352	350	252	142
MAX	202	120	17.3	28.2	44.4	72.3	202	555	920	584	410	326
(WY)	1983	1966	1984	1984	1966	1966	1943	1969	1983	1965	1944	1984
MIN	.000	.000	.000	.000	.000	.000	.000	130	144	155	35.6	.000
(WY)	1991	1948	1943	1943	1943	1943	1944	1977	1945	1961	1989	1992

## SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

## WATER YEARS 1943 - 1993

[illegible]

91

LOCATION.--Lat 40°30'43", long 110°20'27", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 4, T. 1 N., R. 4 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 1.5 mi downstream from powerplant of Moon Lake Electric Association, Inc., 2 mi downstream from Hell Canyon, 8.2 mi northwest of Altonah.

PERIOD OF RECORD.--October 1944 to current year. Prior to October 1965, published as Yellowstone Creek near Altonah.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,360 ft<sup>3</sup>/s June 11, 1990, gage height, 4.93 ft from rating curve extended above 1,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily, 25 ft<sup>3</sup>/s Nov. 28, 1976.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 26	2300	*807	*2.77	June 15	0100	711	2.63

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1993, BY WATER YEAR (WY)

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR		FOR 1993 WATER YEAR		WATER YEARS 1945 - 1993	
ANNUAL TOTAL	30668		47837			
ANNUAL MEAN	83.8		131		138	
HIGHEST ANNUAL MEAN					235	
LOWEST ANNUAL MEAN					75.9	
HIGHEST DAILY MEAN	304	May 26	742	May 26	1800	Jun 19 1983
LOWEST DAILY MEAN	32	Nov 30	29	Jan 5	22	Jan 1 1979
ANNUAL SEVEN-DAY MINIMUM	34	Nov 30	34	Nov 30	26	Dec 31 1978
ANNUAL RUNOFF (AC-FT)	60830		94880		100000	
10 PERCENT EXCEEDS	180		387		310	
50 PERCENT EXCEEDS	58		54		74	
90 PERCENT EXCEEDS	39		37		44	

e Estimated



## GREEN RIVER BASIN

09295000 DUCHESNE RIVER AT MYTON, UT

LOCATION.--Lat 40°12'01", long 110°03'47", in NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 25, T. 3 S., R. 2 W., Uintah Meridian, Duchesne County, Hydrologic Unit 14060003, on left bank at Myton, 3 mi downstream from Lake Fork.

DRAINAGE AREA.--2,643 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1899 to December 1902, April to December 1903, March to December 1904, March to July and September to November 1905, April to July 1906, April to December 1907, March to December 1908, April to December 1909, March to November 1910, July 1911 to current year. Published as "at Price road bridge" 1899-1902.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,061.40 ft above sea level. Prior to Oct. 14, 1933, nonrecording gages at several sites within 0.5 mi of present site at various datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by several reservoirs. Large diversions above station for irrigation, including transmountain diversions to the Great Basin through Duchesne and Strawberry Tunnels, Hobbie Creek ditch, and Strawberry River and Willow Creek ditch.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 12,800 ft<sup>3</sup>/s June 10, 1922, gage height, 7.94 ft site and datum then in use, from rating curve extended above 8,000 ft<sup>3</sup>/s; minimum, less than 1 ft<sup>3</sup>/s July 16, 1931, and for several days in August and September 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1540 ft<sup>3</sup>/s May 27, gage height, 4.81 ft; minimum daily discharge, 12 ft<sup>3</sup>/s May 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	37	53	e78	e86	e110	92	16	566	145	42	37
2	26	33	61	e79	e84	e112	76	19	507	138	43	37
3	27	30	48	e68	e82	e117	70	19	549	114	40	e38
4	27	29	51	e62	e82	e120	67	12	430	125	44	e29
5	32	27	53	e60	e78	e121	74	21	226	84	37	25
6	31	26	60	e66	e82	e125	117	52	256	73	41	27
7	27	27	59	e71	e78	e129	89	71	256	50	35	35
8	26	27	61	e77	e92	e130	73	69	220	37	37	37
9	30	33	98	e79	e92	e135	68	58	191	35	46	36
10	26	33	112	e81	e88	e139	67	36	172	35	95	39
11	27	30	100	e77	e115	e130	59	25	145	35	105	33
12	24	28	93	e72	e110	e122	57	24	149	35	67	34
13	21	32	74	e75	e103	e130	61	29	173	40	49	39
14	18	32	73	e75	e95	e135	58	44	192	42	45	40
15	16	30	72	e82	e94	e140	53	52	413	72	45	44
16	18	29	e70	e89	e90	e140	49	76	846	41	41	44
17	22	29	e74	e92	e98	e140	49	152	940	36	39	47
18	24	28	e70	e96	e110	e142	52	208	877	32	43	53
19	24	36	e66	e94	e135	e140	42	269	508	29	45	51
20	22	52	e73	e93	e124	e132	53	302	479	31	52	45
21	20	54	e76	e84	e116	130	60	406	661	36	70	36
22	21	56	e74	e92	e112	116	54	455	737	40	57	31
23	20	56	e77	e87	e120	109	30	598	537	44	49	30
24	19	56	e77	e81	e120	100	15	640	542	57	48	28
25	19	54	e74	e89	e102	98	16	686	392	71	44	26
26	20	56	e74	e78	e97	91	26	1030	154	57	38	20
27	16	58	e82	e80	e100	91	26	1300	155	41	36	25
28	13	61	e86	e77	e105	90	25	1260	115	43	37	26
29	14	54	e87	e76	---	181	29	1090	175	42	41	27
30	15	51	e78	e82	---	132	22	1080	172	40	44	30
31	21	---	e70	e82	---	98	---	723	---	42	40	---
TOTAL	687	1184	2276	2474	2790	3825	1629	10822	11735	1742	1495	1049
MEAN	22.2	39.5	73.4	79.8	99.6	123	54.3	349	391	56.2	48.2	35.0
MAX	32	61	112	96	135	181	117	1300	940	145	105	53
MIN	13	26	48	60	78	90	15	12	115	29	35	20
AC-FT	1360	2350	4510	4910	5530	7590	3230	21470	23280	3460	2970	2080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1993, BY WATER YEAR (WY)

	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
MEAN	236	289	307	295	319	388	1120	1702	420	171	183													
MAX	1031	1055	1037	982	715	878	1293	4185	6356	2372	695	1597												
(WY)	1984	1984	1984	1984	1984	1916	1952	1952	1922	1917	1921	1927												
MIN	4.81	32.6	34.3	62.3	79.3	56.0	9.43	42.7	17.8	5.01	5.13	1.37												
(WY)	1935	1991	1971	1991	1990	1990	1961	1977	1934	1961	1940	1934												

SUMMARY STATISTICS

	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1912 - 1993
ANNUAL TOTAL	19144.4	41708	
ANNUAL MEAN	52.3	114	483
HIGHEST ANNUAL MEAN			1318
LOWEST ANNUAL MEAN			52.0
HIGHEST DAILY MEAN			9690
LOWEST DAILY MEAN			1.0
ANNUAL SEVEN-DAY MINIMUM			1.0
ANNUAL RUNOFF (AC-FT)	37970	82730	349600
10 PERCENT EXCEEDS	98	177	1030
50 PERCENT EXCEEDS	42	61	290
90 PERCENT EXCEEDS	21	26	33

e Estimated

## GREEN RIVER BASIN

93

09296800 UINTA RIVER BELOW POWERPLANT DIVERSION, NEAR NEOLA, UT

LOCATION.--Lat 40°35'29", long 110°06'49", in NW¼, NW¼, NE¼, sec. 9, T. 2 N., R. 2 W., Uinta Meridian, Duchesne County. Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 100 ft downstream from National Forest boundary, 4.7 mi upstream of Moon Lake Electric Association Inc. hydroelectric powerplant, and 11.5 mi northwest of Neola, Ut.

DRAINAGE AREA.--157 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,330 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated discharges, which are fair. Flow regulated by Moon Lake Electric powerplant canal diversion about 0.75 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,190 ft<sup>3</sup>/s May 25, 1993, from rating curve extended above 1200 ft<sup>3</sup>/s, gage height, 7.21 ft; minimum daily discharge, 11 ft<sup>3</sup>/s Jan. 8, 19, 20, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,190 ft<sup>3</sup>/s May 25, from rating curve extended above 1200 ft<sup>3</sup>/s, gage height, 7.21 ft; minimum daily discharge, 19 ft<sup>3</sup>/s, Feb. 4-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	36	e31	e26	e22	e22	28	42	1170	367	166	123
2	24	45	e30	e26	e21	e22	28	41	1100	364	168	113
3	23	38	e30	e26	e20	e23	28	43	977	371	174	109
4	24	39	e30	e26	e19	e23	29	57	727	309	174	108
5	23	44	e29	e26	e19	e22	30	56	636	281	177	109
6	24	38	e30	e27	e19	e23	27	52	578	245	170	104
7	26	40	e31	e28	e19	e23	25	52	502	226	168	98
8	25	37	e33	e29	e20	e23	25	50	463	215	198	96
9	27	39	e35	e31	e20	e23	28	48	442	202	209	94
10	25	39	e36	e32	e20	e23	29	52	477	203	216	91
11	25	51	e31	e30	e22	e22	28	75	592	213	232	89
12	24	45	e30	e28	e21	e21	27	131	693	237	262	87
13	23	40	e29	e29	e20	e23	25	194	685	235	212	85
14	26	39	e28	e30	e20	e26	26	272	771	218	178	85
15	30	40	e27	e29	e20	e27	28	407	957	203	175	85
16	28	39	e28	e29	e21	e28	29	545	908	195	165	89
17	29	39	e29	e29	e21	e29	30	673	782	186	158	93
18	30	39	e27	e30	e22	e29	34	820	610	178	156	104
19	33	39	e25	e29	e22	e29	36	977	594	176	155	95
20	31	38	e24	e29	e21	e29	32	1150	678	175	164	84
21	31	40	e26	e29	e20	e29	36	1410	732	168	169	79
22	34	37	e27	e25	e22	e28	42	1560	599	166	159	74
23	35	39	e26	e23	e22	e31	52	1710	528	215	148	71
24	33	e34	e26	e21	e21	e32	49	1700	431	289	144	67
25	38	e29	e26	e21	e20	e32	45	1600	408	222	142	64
26	55	e31	e27	e21	e20	32	47	1060	438	211	141	63
27	94	e32	e28	e20	e20	33	55	1030	461	190	135	60
28	105	e29	e28	e20	e21	32	61	1100	441	168	136	59
29	95	e29	e28	e20	---	31	59	1110	441	165	128	57
30	57	e29	e26	e20	---	28	48	1270	392	181	123	55
31	47	---	e26	e21	---	25	---	1230	---	173	122	---
TOTAL	1148	1133	887	810	575	823	1066	20517	19213	6947	5224	2590
MEAN	37.0	37.8	28.6	26.1	20.5	26.5	35.5	662	640	224	169	86.3
MAX	105	51	36	32	22	33	61	1710	1170	371	262	123
MIN	23	29	24	20	19	21	25	41	392	165	122	55
AC-FT	2280	2250	1760	1610	1140	1630	2110	40700	38110	13780	10360	5140

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1993, BY WATER YEAR (WY)

	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
MEAN	57.6	32.4	20.0	24.6	24.9	25.6	39.8	361	495	207	161	134
MAX	107	41.8	28.6	35.2	38.5	28.7	43.7	662	657	267	252	254
(WY)	1992	1992	1993	1991	1991	1991	1991	1993	1991	1991	1991	1991
MIN	28.2	17.8	13.9	12.4	16.0	21.5	35.5	155	188	130	62.9	61.4
(WY)	1991	1991	1992	1992	1992	1992	1993	1991	1992	1992	1992	1992

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1991 - 1993

ANNUAL TOTAL	27614	60933	132
ANNUAL MEAN	75.4	167	167
HIGHEST ANNUAL MEAN			1993
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	353	1710	1710
LOWEST DAILY MEAN	11	19	11
ANNUAL SEVEN-DAY MINIMUM	12	19	12
ANNUAL RUNOFF (AC-FT)	54770	120900	95810
10 PERCENT EXCEEDS	197	487	308
50 PERCENT EXCEEDS	37	39	40
90 PERCENT EXCEEDS	14	22	17

e Estimated

## GREEN RIVER BASIN

09299500 WHITEROCKS RIVER NEAR WHITEROCKS, UT

LOCATION.--Lat 40°35'13", long 109°55'37", in SE¼, NE¼, NW¼, sec. 7, T. 2 N., R. 1 E., Uintah Meridian, Uintah County, Hydrologic Unit 14060003, on right bank, 3.2 mi upstream from U.S. Forest Boundary, and 9.6 mi north-east of Whiterocks.

DRAINAGE AREA.--113 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1899 to December 1903, April to December 1907, March 1908 to November 1910, October 1913 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as Whiterocks River in Canyon, 1899, and as Whiterocks Creek near Whiterocks, 1918-25. November 1917 to June 1921 United States Whiterocks Canal diverted above station (records equivalent if flow of Whiterocks Canal is included).

GAGE.--Water-stage recorder. Elevation of gage is 7,160 ft above sea level, from topographic map. Prior to Oct. 16, 1930, nonrecording gages at several sites within 2 mi of present site at various datums. Oct. 16, 1930 to Nov. 26, 1984, water-stage recorder at various sites and datums about 3 mi downstream.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow slightly regulated by small mountain lakes.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 ft<sup>3</sup>/s, June 22, 1983, gage height, 5.28 ft, from rating curve extended above 2,000 ft<sup>3</sup>/s, site and datum then in use; minimum recorded, 9.2 ft<sup>3</sup>/s Apr. 3, 1977, site and datum then in use. Minimum discharge at present site and datum, 4.9 ft<sup>3</sup>/s Mar. 30, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 27	2030	*1,030	*5.16				

Minimum recorded discharge, 8.5 ft<sup>3</sup>/s, Mar. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	36	e28	e35	e20	e19	31	54	503	204	e170	91
2	61	35	e29	e37	e21	e19	32	51	450	192	e157	87
3	60	35	e28	35	e22	e18	30	51	386	186	154	83
4	60	28	e27	e34	e20	e18	32	68	334	176	159	84
5	61	36	e29	e31	e19	e18	39	72	318	179	174	87
6	59	34	e27	e29	e20	e18	35	67	314	160	158	85
7	59	36	e28	e31	e21	e19	31	64	282	165	148	82
8	55	35	e29	e32	e22	e18	30	60	264	148	177	79
9	53	35	e30	32	e22	e18	35	55	259	135	195	e78
10	55	27	e36	29	22	e18	33	55	267	130	185	76
11	53	e28	e34	24	21	18	33	76	297	126	201	74
12	50	e28	e32	e27	22	17	33	107	313	129	e240	79
13	47	e27	e31	e31	19	20	29	149	302	127	e220	82
14	38	28	e29	e35	e18	19	28	178	302	124	e185	e85
15	36	28	e28	34	e20	19	29	244	330	119	e190	e86
16	35	29	e27	31	e21	19	31	295	338	113	e180	87
17	35	28	e28	30	e21	19	30	339	333	109	e165	97
18	34	28	e26	30	e21	20	33	389	317	106	e152	103
19	32	28	e25	27	22	22	31	447	297	103	e148	102
20	32	28	e26	28	e20	23	32	511	290	102	151	e101
21	32	23	e28	26	e19	23	33	570	295	100	133	e105
22	32	25	e28	24	e20	23	39	575	294	106	117	e100
23	32	27	e29	e24	e19	26	48	581	278	179	106	e97
24	32	27	e29	e24	e19	30	46	578	263	279	100	e96
25	35	25	e29	e25	e17	33	42	651	246	229	e106	e92
26	38	e25	e29	e22	e17	34	44	826	237	217	100	e89
27	40	e25	e30	e20	e18	38	48	854	234	207	96	e86
28	42	e25	e33	e19	e18	36	53	674	224	e191	94	e85
29	51	e26	e36	e18	---	33	59	619	222	e190	90	e83
30	55	e27	e34	e18	---	30	59	526	212	e200	89	e81
31	48	---	e32	e19	---	27	---	552	---	e185	88	---
TOTAL	1413	872	914	861	561	712	1108	10338	9001	4916	4628	2642
MEAN	45.6	29.1	29.5	27.8	20.0	23.0	36.9	333	300	159	149	88.1
MAX	61	36	36	37	22	38	59	854	503	279	240	105
MIN	32	23	25	18	17	17	28	51	212	100	88	74
AC-FT	2800	1730	1810	1710	1110	1410	2200	20510	17850	9750	9180	5240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1993, BY WATER YEAR (WY)

	MEAN	67.0	44.8	34.6	29.5	27.1	27.6	48.8	281	390	176	125	91.3
MAX	155	93.0	58.7	47.2	37.8	41.0	118	584	1178	535	238	190	190
(WY)	1939	1939	1942	1930	1930	1986	1962	1937	1983	1975	1984	1961	1961
MIN	34.8	28.6	19.3	17.7	17.0	17.8	22.9	74.8	50.1	22.4	41.7	42.8	42.8
(WY)	1989	1978	1991	1991	1977	1961	1975	1957	1934	1934	1940	1933	1933

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1930 - 1993

ANNUAL TOTAL	26187	37966	
ANNUAL MEAN	71.5	104	
HIGHEST ANNUAL MEAN			112
LOWEST ANNUAL MEAN			209
HIGHEST DAILY MEAN	291	May 20	854
LOWEST DAILY MEAN	18	Jan 21	17
ANNUAL SEVEN-DAY MINIMUM	20	Jan 17	18
ANNUAL RUNOFF (AC-FT)	51940		75310
10 PERCENT EXCEEDS	177		278
50 PERCENT EXCEEDS	42		38
90 PERCENT EXCEEDS	23		20
			25

e Estimated

## GREEN RIVER BASIN

95

09302000 DUCHESNE RIVER NEAR RANDLETT, UT

LOCATION.--Lat 40°12'56", long 109°46'58", in SW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 16, T. 3 S., R. 2 E., Uintah Meridian, Uintah County, Hydrologic Unit 14060003, Uintah and Ouray Indian Reservation, on left bank 0.25 mi downstream from Uintah River, 1.2 mi southeast of Randlett, and 6.5 mi southeast of Fort Duchesne.

DRAINAGE AREA.--4,247 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,756.1 ft above sea level. Prior to Aug. 23, 1944 at site 300 ft downstream at different datum. Aug. 23, 1944 to Sept. 4, 1964 at site 200 ft upstream at datum 1.87 ft higher. Sept. 5, 1964 to June 6, 1968 at site 700 ft upstream at datum 1.68 ft higher. June 7, 1968 to Aug. 31, 1970 at site 200 ft upstream at datum 1.87 ft higher. Sept. 1, 1970 to June 7, 1975 at site 300 ft upstream at datum 2.23 ft higher. June 7, 1975 to May 5, 1977 at site 200 ft upstream at datum 1.87 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by several reservoirs. Large diversions above station for irrigation, including transmountain diversions to the Great Basin through Duchesne and Strawberry Tunnels, Hobbie Creek ditch, Strawberry River, and Willow Creek Ditch.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 11,500 ft<sup>3</sup>/s June 20, 1983; maximum gage height, 10.22 ft June 5, 1986; minimum, 2.2 ft<sup>3</sup>/s Aug. 12, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,040 ft<sup>3</sup>/s May 28, gage height, 7.59 ft; minimum daily discharge, 32 ft<sup>3</sup>/s July 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	109	e99	e90	e92	e131	266	49	1520	218	51	61
2	58	94	e96	e99	e94	e132	223	54	1190	196	43	64
3	65	79	e96	e92	e98	e134	199	61	1070	178	42	71
4	59	74	e94	e88	e95	e135	177	53	969	186	37	74
5	62	74	e98	e82	e92	e136	170	70	591	172	52	74
6	57	70	e90	e90	e87	e138	300	121	515	144	54	67
7	59	66	e82	e99	e88	e140	288	149	519	113	70	82
8	61	66	e82	e109	e90	e146	217	146	438	94	68	90
9	68	66	e90	e114	e92	e170	178	130	388	77	105	78
10	76	67	e111	e116	e99	e180	158	112	360	69	119	71
11	93	66	e130	e110	e113	e200	146	78	327	80	207	80
12	93	61	e120	e93	e127	e189	133	61	305	66	200	66
13	75	62	e106	e95	e122	e175	123	50	307	81	143	66
14	81	67	e96	e103	e120	e160	126	52	293	79	107	75
15	71	68	e98	e102	e111	e170	118	73	375	62	108	103
16	63	67	e99	e109	e107	e164	106	83	647	96	96	110
17	79	68	e104	e111	e104	e190	103	155	1000	52	77	117
18	78	68	e111	e110	e106	e210	99	261	1140	50	76	130
19	72	67	e113	e108	e110	e220	98	333	774	43	70	150
20	71	79	e103	e110	e140	e231	86	398	596	40	95	155
21	63	88	e100	e107	e135	e230	118	573	701	32	152	142
22	64	87	e100	e100	e135	e230	88	649	835	37	194	99
23	59	85	e104	e96	e140	e236	97	973	706	64	152	90
24	57	83	e108	e92	e150	223	64	1140	671	81	128	86
25	56	e81	e107	e93	e140	198	58	1160	529	84	103	74
26	65	e82	e102	e90	e124	189	60	1800	300	78	80	75
27	70	e89	e102	e87	e121	184	64	2680	252	62	68	73
28	70	e96	e109	e85	e129	199	47	2910	226	63	67	74
29	73	e90	e105	e87	---	399	49	2590	209	63	66	81
30	79	e82	e102	e88	---	463	46	2390	254	58	68	89
31	125	---	e88	e89	---	348	---	1810	---	60	74	---
TOTAL	2186	2301	3145	3044	3161	6250	4005	21164	18007	2778	2972	2667
MEAN	70.5	76.7	101	98.2	113	202	133	683	600	89.6	95.9	88.9
MAX	125	109	130	116	150	463	300	2910	1520	218	207	155
MIN	56	61	82	82	87	131	46	49	209	32	37	61
AC-FT	4340	4560	6240	6040	6270	12400	7940	41980	35720	5510	5890	5290

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1993, BY WATER YEAR (WY)

	301	383	412	405	447	498	426	1041	1916	476	210	200
MEAN	301	383	412	405	447	498	426	1041	1916	476	210	200
MAX	1529	1443	1352	1246	964	1202	1865	4938	7988	2840	926	975
(WY)	1984	1984	1984	1984	1984	1983	1952	1952	1983	1965	1965	1965
MIN	52.9	42.6	39.6	43.3	52.6	88.4	28.5	47.5	50.0	10.1	9.91	18.9
(WY)	1990	1990	1990	1990	1990	1990	1961	1961	1961	1961	1961	1960

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1943 - 1993

ANNUAL TOTAL	37466	71680	559	1983
ANNUAL MEAN	102	196	1736	1990
HIGHEST ANNUAL MEAN			76.4	1983
LOWEST ANNUAL MEAN			11500	1983
HIGHEST DAILY MEAN	249	Jul 9	3.2	Aug 9 1961
LOWEST DAILY MEAN	28	Apr 14	4.2	Aug 7 1961
ANNUAL SEVEN-DAY MINIMUM	36			
ANNUAL RUNOFF (AC-FT)	74310	142200	404700	
10 PERCENT EXCEEDS	190	339	1140	
50 PERCENT EXCEEDS	83	99	345	
90 PERCENT EXCEEDS	53	62	58	

e Estimated

## GREEN RIVER BASIN

09302000 DUCHESNE RIVER NEAR RANDLETT, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1951, November 1956 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1950 to September 1951, November 1956 to September 1980, June 1981 to current year.

WATER TEMPERATURES: December 1950 to September 1951, November 1956 to September 1978, October 1979 to September 1980, June 1981 to current year.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,490 microsiemens Aug. 24, 1960; minimum observed, 225 microsiemens June 22, 1983.

WATER TEMPERATURES: Maximum, 29.0°C several days during 1982, 1989, 1991, 1992; minimum, 0.0°C on many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,140 microsiemens May 1; minimum daily, 365 microsiemens, May 26, 27.

WATER TEMPERATURES: Maximum, 27.0°C July 15; minimum, 0.0°C many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRESSURE (MM OF HG)	HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
OCT, 1992											
05...	1300	63	2060	8.3	28.0	14.0	10.7	643	600	120	74
NOV											
02...	1430	92	2840	8.5	13.5	10.0	10.9	634	810	160	100
DEC											
07...	1645	81	2110	8.5	-9.0	-0.5	12.6	643	720	150	83
JAN, 1993											
04...	1600	88	--	8.2	-9.0	-0.5	11.5	644	--	--	--
MAR											
08...	1330	E146	1000	8.3	3.0	0.0	12.2	644	330	71	38
APR											
12...	1630	126	1980	8.5	4.0	7.0	10.3	637	630	120	81
MAY											
14...	1100	41	2400	8.3	23.0	16.0	--	--	660	130	82
JUN											
15...	1730	384	980	8.2	32.0	23.0	7.7	633	320	67	38
JUL											
16...	1100	100	1520	8.3	22.0	19.0	9.4	638	430	88	51
AUG											
16...	1500	94	1790	8.5	32.0	21.0	9.4	638	580	120	67
SEP											
13...	1630	67	1890	8.6	16.0	17.0	--	--	550	110	67

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
OCT, 1992										
05...	250	47	4	4.2	620	100	0.60	11	1470	1370
NOV										
02...	390	51	6	7.1	1100	140	0.70	12	2180	2120
DEC										
07...	250	43	4	3.0	670	100	0.60	13	1590	1440
JAN, 1993										
04...	--	--	--	--	--	--	--	--	--	--
MAR										
08...	86	36	2	1.8	270	39	0.30	9.6	656	642
APR										
12...	220	43	4	3.9	680	100	0.60	11	1430	1400
MAY										
14...	310	50	5	4.8	850	140	0.70	8.6	1760	1690
JUN										
15...	84	36	2	3.5	240	32	0.40	11	636	618
JUL										
16...	51	--	1	--	--	--	--	8.0	1050	--
AUG										
16...	200	43	4	5.1	570	110	0.60	16	1270	1270
SEP										
13...	220	46	4	4.4	630	110	0.70	14	1330	1330

E Estimated.

## GREEN RIVER BASIN

97

09302000 DUCHESNE RIVER NEAR RANDLETT, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT, 1992										
05...	2.00	251	--	--	<0.010	<0.050	0.050	0.06	<0.010	--
NOV										
02...	2.96	540	0.130	0.130	0.010	0.140	0.020	0.03	<0.010	--
DEC										
07...	2.16	350	0.240	0.240	0.010	0.250	0.020	0.03	<0.010	--
JAN, 1993										
04...	--	--	0.340	0.340	0.030	0.370	0.030	0.04	<0.010	--
MAR										
08...	0.89	259	0.160	--	<0.010	0.160	0.040	0.05	<0.010	--
APR										
12...	1.94	486	0.110	--	<0.010	0.110	0.020	0.03	<0.010	--
MAY										
14...	2.39	196	--	--	<0.010	<0.050	0.020	0.03	<0.010	--
JUN										
15...	0.86	659	0.068	--	<0.010	0.068	0.040	0.05	0.020	0.06
JUL										
16...	--	--	0.160	0.160	0.010	0.170	0.040	0.05	<0.010	--
AUG										
16...	1.73	323	0.110	--	<0.010	0.110	0.040	0.05	<0.010	--
SEP										
13...	1.81	242	--	--	<0.010	<0.050	0.030	0.04	<0.010	--

DATE	TIME	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
JUL, 1993									
16...	1100	74	<0.5	2.0	<5	<3	<10	9	<10

DATE	TIME	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUL, 1993									
16...	110	20	10	<10	<1.0	1900	<6	11	

DATE	TIME	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	BORON, DIS- SOLVED (UG/L AS B)
OCT, 1992			
05...	1300	<1	1200
NOV			
02...	1430	1	1500
DEC			
07...	1645	1	1000
MAR, 1993			
08...	1330	<1	340
APR			
12...	1630	<1	810
MAY			
14...	1100	<1	1100
JUN			
15...	1730	<1	480
JUL			
16...	1100	<1	840
AUG			
16...	1500	<1	850
SEP			
13...	1630	1	900



## GREEN RIVER BASIN

09302000 DUCHESNE RIVER NEAR RANDLETT, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2020	3110	1910	1340	1170	1180	1570	3140	385	1040	1740	1910
2	2020	3130	1990	1350	1180	1170	1570	2950	430	1150	1810	1940
3	2030	2980	2140	1360	1150	1120	1550	2550	550	1200	1780	1940
4	2020	2710	2140	1370	1270	1150	1590	2450	610	1140	1920	1950
5	1940	2470	2200	1390	1240	1120	1670	2420	720	1280	2020	1840
6	1940	2510	2040	1350	1280	1140	1660	2460	820	1630	2050	1830
7	2040	2590	1960	1320	1240	1060	1900	2520	930	1560	1610	1910
8	2040	2550	1910	1340	1200	1110	1850	2250	920	1570	1800	1800
9	2030	2370	1940	1260	1100	1080	1870	2020	980	1660	1690	1720
10	1950	2550	1500	1170	1110	1140	1810	2010	1050	1650	1730	1900
11	1950	2490	1500	1270	1040	1140	1870	2070	1080	1640	1600	1900
12	1810	2580	1530	1210	1050	1560	1800	2430	1080	1680	1610	1790
13	1810	2550	1650	1280	1200	1550	1850	2570	980	1590	1600	1970
14	1950	2390	1820	1240	1240	1560	1880	2480	960	1600	1730	1880
15	1960	2290	1810	1250	1210	1660	2030	2690	850	1620	1730	1780
16	1960	2370	1830	1230	1260	1960	2020	2650	630	1600	1750	1700
17	1830	2560	1710	1220	1280	1660	1890	2360	550	1610	1710	1750
18	2030	2450	1720	1160	1120	1530	1910	1320	650	1700	1690	1760
19	2050	2420	1590	1190	1180	1710	1930	1180	800	1690	1760	1720
20	2060	2170	1620	1170	1020	1670	1940	1120	800	1790	1650	1620
21	2090	2270	1580	1180	1010	1720	1810	980	660	1900	1530	1590
22	2150	2200	1660	1230	1080	1740	1650	590	640	1910	1530	1700
23	2230	2040	1660	1230	1080	1780	2070	590	640	1760	1670	1790
24	2220	2110	1500	1330	1080	1790	1900	520	550	1670	1830	1840
25	2310	2160	1510	1320	1080	1870	1980	510	610	1690	1620	1910
26	2300	2630	1420	1200	1010	1820	1980	365	---	1780	1810	1970
27	2400	2590	1480	1270	1140	1900	2320	365	---	1780	1770	2020
28	2220	2260	1470	1310	1120	2000	2260	400	1030	1710	1770	1990
29	2200	2170	1450	1260	---	2250	2300	405	1010	1840	1770	1600
30	2270	2100	1350	1290	---	1880	2300	430	940	1800	1870	1960
31	2310	---	1400	1180	---	1790	---	430	---	1820	1870	---

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	---	.0	.0	.0	.0	9.0	19.0	19.0	23.0	24.0	23.0
2	18.0	---	.0	.0	.0	.0	9.0	19.0	19.0	20.0	26.0	23.0
3	18.0	---	.0	.0	.0	.0	9.0	19.0	17.0	18.0	26.0	23.0
4	17.0	---	.0	.0	.0	.0	9.0	14.0	16.0	23.0	23.0	23.0
5	15.0	---	.0	.0	.0	.0	8.0	14.0	16.0	23.0	26.0	21.0
6	15.0	---	.0	.0	.0	.0	8.0	12.0	16.0	24.0	26.0	21.0
7	15.0	8.0	.0	.0	.0	.0	7.0	12.0	16.0	23.0	24.0	22.0
8	15.0	8.0	.0	.0	.0	.0	8.0	12.0	16.0	23.0	24.0	21.0
9	15.0	8.0	.0	.0	.0	.0	11.0	17.0	21.0	24.0	24.0	21.0
10	---	8.0	.0	.0	.0	.0	11.0	19.0	22.0	25.0	24.0	23.0
11	---	4.0	.0	.0	.0	.0	11.0	19.0	23.0	25.0	24.0	23.0
12	14.0	7.0	.0	.0	.0	.0	9.0	21.0	23.0	24.0	24.0	21.0
13	---	7.0	.0	.0	.0	.0	6.0	22.0	24.0	26.0	24.0	17.0
14	14.0	5.0	.0	.0	.0	.0	9.0	22.0	24.0	26.0	24.0	18.0
15	14.0	5.0	.0	.0	.0	.0	9.0	24.0	24.0	27.0	24.0	18.0
16	14.0	5.0	.0	.0	.0	.0	11.0	24.0	24.0	26.0	24.0	18.0
17	14.0	6.0	.0	.0	.0	.0	10.0	24.0	18.0	26.0	23.0	18.0
18	14.0	4.0	.0	.0	.0	.0	8.0	24.0	18.0	26.0	25.0	16.0
19	14.0	5.0	.0	.0	.0	.0	8.0	24.0	24.0	26.0	23.0	18.0
20	14.0	5.0	.0	.0	.0	.0	14.0	24.0	24.0	26.0	23.0	17.0
21	13.0	5.0	.0	.0	.0	.0	9.0	21.0	24.0	23.0	20.0	19.0
22	14.0	5.0	.0	.0	.0	.0	11.0	19.0	23.0	24.0	20.0	19.0
23	14.0	3.0	.0	.0	.0	.0	15.0	19.0	23.0	19.0	24.0	19.0
24	14.0	4.0	.0	.0	.0	.0	15.0	20.0	23.0	21.0	24.0	17.0
25	13.0	3.0	.0	.0	.0	.0	17.0	20.0	23.0	21.0	24.0	18.0
26	---	1.0	.0	.0	.0	.0	15.0	16.0	23.0	23.0	24.0	17.0
27	14.0	1.0	.0	.0	.0	.0	19.0	16.0	23.0	23.0	24.0	18.0
28	10.0	.0	.0	.0	.0	.0	19.0	18.0	23.0	26.0	23.0	15.0
29	10.0	.0	.0	.0	---	.0	18.0	18.0	24.0	25.0	23.0	16.0
30	---	.0	.0	.0	---	.0	14.0	19.0	23.0	26.0	23.0	18.0
31	---	---	.0	.0	---	.0	---	19.0	---	26.0	23.0	---

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LOCATION.--Lat 39°58'46", long 109°10'41", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 2, T. 10 S., R. 24 E., Uintah County, Hydrologic Unit 14050007, on right bank 350 ft downstream from bridge on State Highway 45, 1 mi downstream from Evacuation Creek, and 7 mi north of Watson.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1906 (no winter records), May to November 1918, April 1923 to September, 1979, October 1985 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Dragon" 1906 and "near Rangely, Colo." 1904-1905, 1918.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 31,900 acres above station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft<sup>3</sup>/s and maximum (\*):

Minimum daily discharge, 200 ft<sup>3</sup>/s Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	429	459	383	e240	e340	e340	784	1200	3660	2090	598	541
2	401	453	358	e270	e350	e320	668	1190	3690	1990	733	445
3	371	528	398	e240	e390	e330	644	1120	3740	1860	585	469
4	342	472	407	e215	e350	e340	678	1130	3710	1820	568	427
5	317	425	346	e200	e280	e350	676	1310	3380	1770	573	430
6	294	408	268	e250	e260	e390	1410	1470	2740	1610	536	281
7	281	416	263	e280	e280	e425	1600	1400	2600	1430	505	415
8	299	415	e300	e320	e310	e460	1040	1320	2650	1310	449	344
9	334	419	e350	e350	e360	e560	827	1280	2600	1210	435	447
10	345	425	e340	e360	e450	e600	740	1150	2180	1130	487	384
11	348	419	e360	e350	e430	e650	690	1060	1950	1050	546	365
12	345	411	e380	e305	e470	e600	691	1080	1970	1080	720	425
13	345	380	e360	e270	e350	e580	711	1250	2050	1020	496	391
14	341	383	e320	e280	e320	e620	716	1170	2350	997	596	345
15	342	417	e330	e310	e305	e650	691	1980	2560	970	527	306
16	343	398	e290	e350	e290	661	686	2410	2760	921	498	405
17	338	394	e260	e410	e330	782	633	2870	3000	884	485	401
18	336	395	e270	e400	e320	951	730	3230	3290	846	445	382
19	337	399	e260	e380	e400	1230	716	3520	3310	805	475	426
20	334	405	e250	e380	e440	1180	733	3560	2970	785	471	447
21	333	418	e240	e350	e430	914	705	3800	2680	756	461	457
22	329	403	e240	e340	e350	722	665	4180	2670	742	473	437
23	329	383	e230	e310	e370	667	656	4570	2720	713	463	418
24	332	380	e260	e300	e350	610	729	4540	2740	728	465	411
25	330	357	e230	e280	e350	629	825	4030	2630	761	384	398
26	394	315	e230	e245	e330	592	841	3730	2360	829	366	408
27	346	278	e230	e230	e340	612	820	3920	2190	757	352	406
28	374	227	e270	e240	e360	932	880	4030	2150	709	489	410
29	362	253	e250	e240	---	1460	1030	4030	2180	701	267	335
30	380	290	e240	e270	---	1520	1130	3960	2110	460	341	380
31	561	---	e210	e290	---	1080	---	3760	---	572	521	---
TOTAL	10892	11725	9123	9255	9905	21757	24345	79650	81590	33306	15330	12136
MEAN	351	391	294	299	354	702	811	2569	2720	1074	495	405
MAX	561	528	407	410	470	1520	1600	4570	3740	2090	733	541
MIN	281	227	210	200	260	320	633	1060	1950	460	267	281
AC-FT	21600	23260	18100	18360	19650	43160	48290	158000	161800	66060	30410	24070

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1993, BY WATER YEAR (WY)

MEAN	463	425	362	356	429	585	712	1593	1813	709	479	435
MAX	1029	713	600	580	1414	1180	2466	3537	4018	2923	1915	1917
(WY)	1930	1930	1926	1926	1986	1939	1929	1929	1929	1929	1929	1929
MIN	243	287	230	160	246	336	368	384	227	109	182	208
(WY)	1964	1933	1931	1937	1949	1952	1961	1977	1934	1934	1990	1955

### SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

## WATER YEARS 1924 - 1993

ANNUAL TOTAL	186090		319014					
ANNUAL MEAN	508		874			697		
HIGHEST ANNUAL MEAN						1736		1929
LOWEST ANNUAL MEAN						308		1977
HIGHEST DAILY MEAN	1670	May 11	4570	May 23	8160		Jul 15	1929
LOWEST DAILY MEAN	154	Aug 22	200	Jan 5	13		Jul 3	1977
ANNUAL SEVEN-DAY MINIMUM	175	Sep 11	231	Dec 30	33		Jun 28	1977
ANNUAL RUNOFF (AC-FT)	369100		632800		505000			
10 PERCENT EXCEEDS	916		2380		1580			
50 PERCENT EXCEEDS	412		445		444			
90 PERCENT EXCEEDS	250		280		290			

e Estimated

GREEN RIVER BASIN  
09306500 WHITE RIVER NEAR WATSON, UT--Continued  
WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1979, October 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1950 to September 1979, October 1986 to current year.

WATER TEMPERATURES: December 1950 to September 1979, October 1986 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to June 1979, October 1985 to September 1990 (discontinued).

INSTRUMENTATION.--Water-quality monitor since November 1985.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 4,450 microsiemens Aug. 4, 1955; minimum recorded, 136 microsiemens

May 20, 1989.

WATER TEMPERATURES: Maximum recorded, 33.0°C July 15, 1977; minimum, 0.0°C many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 31,100 mg/L Aug. 8, 1987; minimum daily mean, 31 mg/L

Sept. 7, 8, 1989.

SEDIMENT LOADS: Maximum daily, 121,000 tons Aug. 8, 1987; minimum daily, 12 tons Sept. 7, 8, 1989.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,260 microsiemens Apr. 14; minimum recorded, 375 microsiemens

Mar. 30, July 29.

WATER TEMPERATURES: Maximum recorded, 26.7°C July 30; minimum, 0.0°C many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT, 1992											
07...	1130	272	810	8.5	16.0	10.5	10.3	642	300	71	31
NOV											
05...	1230	429	776	8.5	10.5	7.5	10.3	635	300	75	27
DEC											
09...	1315	308	820	8.6	1.0	0.5	--	--	320	79	30
JAN, 1993											
06...	1100	253	810	8.4	-8.0	0.0	10.8	642	280	71	25
MAR											
11...	1030	E600	800	8.3	6.5	1.0	10.9	639	280	64	28
APR											
12...	1300	743	1140	8.5	13.0	8.0	10.2	635	380	79	44
MAY											
11...	1330	1120	740	8.6	25.0	16.0	8.3	638	270	60	30
JUN											
02...	1320	3720	420	8.1	25.5	13.0	8.3	630	160	40	15
JUL											
12...	1830	982	470	8.4	25.0	22.0	7.5	624	--	--	--
AUG											
17...	1100	558	750	8.6	29.0	19.0	8.2	637	300	72	29
SEP											
15...	1200	265	780	8.5	21.0	15.0	--	--	290	65	32

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)
OCT, 1992										
07...	56	28	1	2.3	200	16	0.30	11	518	506
NOV										
05...	50	27	1	1.7	200	15	0.30	12	456	479
DEC										
09...	53	26	1	1.7	190	15	0.30	13	537	508
JAN, 1993										
06...	46	26	1	1.6	170	12	0.20	14	441	464
MAR										
11...	64	33	2	2.4	210	15	0.20	13	511	509
APR										
12...	110	39	2	3.0	350	28	0.30	12	768	763
MAY										
11...	55	30	1	2.0	190	12	0.20	14	498	482
JUN										
02...	23	23	0.8	1.5	81	4.2	0.20	13	265	260
JUL										
12...	--	--	--	--	--	--	--	--	290	--
AUG										
17...	54	28	1	1.9	170	13	0.30	15	482	475
SEP										
15...	59	30	1	2.6	200	16	0.30	13	512	500

E Estimated.

## GREEN RIVER BASIN

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09306500 WHITE RIVER NEAR WATSON, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT, 1992										
07...	0.70	380	--	--	<0.010	<0.050	0.040	0.05	<0.010	--
NOV										
05...	0.62	528	0.069	--	<0.010	0.069	0.010	0.01	<0.010	--
DEC										
09...	0.73	447	0.069	--	<0.010	0.069	0.020	0.03	<0.010	--
JAN, 1993										
06...	0.60	301	0.140	0.140	0.030	0.170	0.050	0.06	<0.010	--
MAR										
11...	0.69	828	--	--	--	--	--	--	--	--
APR										
12...	1.04	1540	0.560	--	<0.010	0.560	0.010	0.01	<0.010	--
MAY										
11...	0.68	1510	0.480	--	<0.010	0.480	0.020	0.03	<0.010	--
JUN										
02...	0.36	2660	0.290	--	<0.010	0.290	0.030	0.04	0.010	0.03
JUL										
12...	--	--	--	--	<0.010	<0.050	0.030	0.04	<0.010	--
AUG										
17...	0.66	726	--	--	<0.010	<0.050	0.020	0.03	<0.010	--
SEP										
15...	0.70	366	0.077	--	<0.010	0.077	<0.010	--	<0.010	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
OCT, 1992			
07...	1130	70	1
NOV			
05...	1230	60	1
DEC			
09...	1315	60	1
JAN, 1993			
06...	1100	50	<1
MAR			
11...	1030	70	1
APR			
12...	1300	130	4
MAY			
11...	1330	80	2
JUN			
02...	1320	30	1
JUL			
12...	1830	40	<1
AUG			
17...	1100	70	1
SEP			
15...	1200	80	1

## GREEN RIVER BASIN

09306500 WHITE RIVER NEAR WATSON, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	779	761	771	678	558	591	736	697	715	---	---	---
2	785	767	774	617	567	579	717	687	702	---	---	---
3	789	771	778	846	607	780	717	677	700	---	---	---
4	795	779	787	766	735	746	698	677	692	---	---	---
5	800	781	792	755	745	751	708	688	700	---	---	---
6	806	788	798	756	735	746	719	698	709	---	---	---
7	815	785	803	746	736	741	719	709	715	---	---	---
8	795	754	771	746	726	736	---	---	---	---	---	---
9	764	763	764	747	717	736	---	---	---	---	---	---
10	763	743	758	747	727	734	---	---	---	---	---	---
11	762	742	751	747	728	737	---	---	---	---	---	---
12	762	741	753	748	728	738	---	---	---	---	---	---
13	751	731	745	769	738	746	---	---	---	---	---	---
14	750	730	741	799	739	756	---	---	---	---	---	---
15	750	719	735	750	739	743	---	---	---	---	---	---
16	739	709	723	750	740	743	---	---	---	---	---	---
17	728	698	716	750	730	744	---	---	---	---	---	---
18	708	677	693	751	740	745	---	---	---	---	---	---
19	687	666	681	751	731	740	---	---	---	---	---	---
20	676	656	666	752	731	740	---	---	---	---	---	---
21	666	615	646	752	732	744	---	---	---	---	---	---
22	625	564	598	753	732	743	---	---	---	---	---	---
23	574	544	556	753	713	734	---	---	---	---	---	---
24	544	523	535	733	693	709	---	---	---	---	---	---
25	533	502	518	714	694	704	---	---	---	---	---	---
26	692	512	539	734	694	714	---	---	---	---	---	---
27	522	501	508	735	714	728	---	---	---	---	---	---
28	501	480	491	745	715	731	---	---	---	---	---	---
29	490	480	484	736	725	731	---	---	---	---	---	---
30	489	479	482	746	706	726	---	---	---	---	---	---
31	648	469	550	---	---	---	---	---	---	---	---	---
MONTH	815	469	674	846	558	728	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	805	745	786	943	897	920
2	---	---	---	---	---	---	825	795	809	900	887	892
3	---	---	---	---	---	---	835	805	820	976	843	866
4	---	---	---	---	---	---	825	785	796	976	788	835
5	---	---	---	---	---	---	835	795	806	842	765	807
6	---	---	---	---	---	---	915	707	795	887	749	787
7	---	---	---	---	---	---	788	727	755	764	692	735
8	---	---	---	---	---	---	852	788	822	766	688	742
9	---	---	---	---	---	---	915	847	887	723	680	699
10	---	---	---	---	---	---	974	915	948	767	703	741
11	---	---	---	---	---	---	1030	974	1010	750	728	739
12	---	---	---	---	---	---	1130	1030	1090	755	722	737
13	---	---	---	---	---	---	1120	1090	1110	741	712	733
14	---	---	---	---	---	---	1260	1090	1130	726	677	715
15	---	---	---	---	---	---	1170	1100	1120	690	642	671
16	---	---	---	842	676	792	1120	1080	1100	654	597	627
17	---	---	---	917	729	862	1160	1090	1120	631	592	611
18	---	---	---	947	873	906	1100	1080	1090	605	564	588
19	---	---	---	961	699	877	1100	1080	1090	630	582	603
20	---	---	---	941	876	917	1100	1080	1090	599	584	593
21	---	---	---	963	905	931	1090	1080	1080	610	582	591
22	---	---	---	972	866	911	1100	1080	1090	594	575	583
23	---	---	---	978	879	912	1100	1090	1100	589	571	578
24	---	---	---	925	885	906	1100	1070	1090	595	489	525
25	---	---	---	925	785	894	1090	1050	1060	499	452	477
26	---	---	---	895	765	814	1060	1030	1040	517	485	500
27	---	---	---	855	785	823	1070	1010	1030	530	493	512
28	---	---	---	1000	775	837	1040	993	1010	518	467	503
29	---	---	---	835	465	742	1000	958	979	511	424	474
30	---	---	---	655	375	503	958	929	941	436	397	408
31	---	---	---	865	625	784	---	---	---	414	394	405
MONTH	---	---	---	---	---	---	1260	707	986	976	394	652

## GREEN RIVER BASIN

103

09306500 WHITE RIVER NEAR WATSON, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	411	396	407	438	417	424	509	479	494	750	567	586
2	414	402	411	458	438	450	560	480	499	789	584	738
3	415	404	410	459	429	447	511	481	497	796	762	782
4	415	405	412	439	419	429	503	483	494	803	787	793
5	426	415	418	450	419	433	515	484	495	805	794	797
6	426	416	416	450	430	436	566	495	513	811	722	751
7	417	416	416	441	430	434	577	506	545	814	727	740
8	427	417	419	451	431	442	578	518	556	814	715	733
9	428	417	423	452	441	446	600	519	574	812	722	741
10	428	418	427	452	442	448	601	501	574	762	727	754
11	438	428	429	463	452	453	623	572	585	769	754	761
12	439	428	434	463	453	456	724	613	687	767	743	761
13	449	429	439	474	453	462	795	714	767	773	658	719
14	450	439	443	476	455	470	807	795	797	789	664	697
15	450	440	445	477	456	466	797	698	738	790	671	751
16	441	431	439	489	467	482	729	698	714	781	681	729
17	441	421	431	509	489	495	730	682	701	734	712	726
18	432	421	427	521	500	505	710	678	697	785	724	736
19	432	422	426	522	492	505	713	666	698	817	687	748
20	432	412	416	494	474	487	669	611	636	739	627	731
21	423	403	413	485	464	476	627	609	617	740	720	730
22	414	403	413	476	466	472	634	602	618	742	721	733
23	414	404	412	468	457	462	632	609	620	743	724	733
24	415	404	412	459	448	456	649	614	638	735	724	728
25	425	415	416	470	449	455	631	603	616	736	726	729
26	426	405	414	461	442	453	663	560	616	738	718	728
27	426	416	421	453	432	440	654	615	631	740	729	731
28	427	416	424	444	424	434	635	563	601	732	721	726
29	427	417	423	435	375	399	774	568	615	744	722	734
30	427	417	423	497	376	396	776	579	646	755	734	739
31	---	---	---	508	478	497	756	563	620	---	---	---
MONTH	450	396	422	522	375	455	807	479	616	817	567	736

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.6	12.4	15.0	9.7	7.0	8.4	.3	.2	.2	---	---	---
2	17.5	12.4	14.9	9.7	8.2	8.8	.2	.2	.2	---	---	---
3	16.1	12.5	14.3	8.4	6.8	7.6	.2	.2	.2	---	---	---
4	16.3	11.6	13.9	8.5	6.2	7.3	.2	.1	.2	---	---	---
5	16.0	11.3	13.7	8.3	6.3	7.2	.1	.1	.1	---	---	---
6	15.3	11.5	13.2	8.7	5.8	7.2	.1	.1	.1	---	---	---
7	13.6	10.0	11.7	9.2	6.5	7.8	.1	.0	.1	---	---	---
8	11.8	7.8	9.9	8.3	6.2	7.5	---	---	---	---	---	---
9	13.6	8.8	11.2	7.8	5.5	6.7	---	---	---	---	---	---
10	14.0	9.2	11.7	5.9	4.0	5.1	---	---	---	---	---	---
11	14.4	9.5	12.0	4.5	1.8	3.3	---	---	---	---	---	---
12	14.6	9.8	12.3	4.7	1.9	3.3	---	---	---	---	---	---
13	14.4	10.2	12.4	5.4	2.1	3.8	---	---	---	---	---	---
14	14.8	11.0	12.8	5.7	2.6	4.3	---	---	---	---	---	---
15	12.7	10.1	11.5	5.7	2.8	4.5	---	---	---	---	---	---
16	11.4	8.7	10.1	5.5	2.9	4.3	---	---	---	---	---	---
17	12.3	7.8	10.1	5.7	2.8	4.4	---	---	---	---	---	---
18	12.7	8.3	10.5	6.2	3.8	5.0	---	---	---	---	---	---
19	13.9	9.7	11.7	6.5	4.6	5.5	---	---	---	---	---	---
20	13.7	9.5	11.7	5.6	4.2	4.9	---	---	---	---	---	---
21	11.7	9.1	10.5	4.5	3.0	3.8	---	---	---	---	---	---
22	12.0	8.5	10.3	3.3	2.0	2.6	---	---	---	---	---	---
23	13.1	8.8	11.0	3.1	1.6	2.4	---	---	---	---	---	---
24	13.2	9.3	11.3	2.1	.4	1.4	---	---	---	---	---	---
25	12.6	10.0	11.4	.4	.4	.4	---	---	---	---	---	---
26	12.7	9.3	11.1	1.1	.4	.5	---	---	---	---	---	---
27	11.5	9.0	10.5	.6	.4	.3	---	---	---	---	---	---
28	10.9	10.0	10.6	.4	.3	.3	---	---	---	---	---	---
29	11.8	10.0	10.8	.3	.3	.3	---	---	---	---	---	---
30	10.7	9.8	10.3	.3	.3	.3	---	---	---	---	---	---
31	10.0	8.4	9.4	---	---	---	---	---	---	---	---	---
MONTH	17.6	7.8	11.7	9.7	.3	4.3	---	---	---	---	---	---



## GREEN RIVER BASIN

09306500 WHITE RIVER NEAR WATSON, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	10.4	5.8	7.9	14.6	11.5	12.9
2	---	---	---	---	---	---	8.1	6.0	7.2	14.7	11.7	13.2
3	---	---	---	---	---	---	10.0	4.9	7.1	15.2	12.7	13.8
4	---	---	---	---	---	---	10.3	6.1	8.1	13.6	9.3	11.5
5	---	---	---	---	---	---	8.9	5.8	7.6	11.1	8.7	9.9
6	---	---	---	---	---	---	6.4	4.8	5.6	11.5	10.7	11.0
7	---	---	---	---	---	---	7.4	5.1	6.3	12.3	10.7	11.4
8	---	---	---	---	---	---	10.0	5.6	7.5	11.3	10.0	10.7
9	---	---	---	---	---	---	11.3	7.3	8.9	13.2	9.7	11.4
10	---	---	---	---	---	---	12.4	7.6	9.5	14.0	10.9	12.4
11	---	---	---	---	---	---	11.3	7.3	9.1	16.5	12.0	14.0
12	---	---	---	---	---	---	8.5	5.9	7.5	17.1	13.0	15.0
13	---	---	---	---	---	---	11.5	5.1	8.1	16.7	14.0	15.5
14	---	---	---	---	---	---	12.3	7.2	9.5	17.2	15.0	16.1
15	---	---	---	---	---	---	13.0	7.2	9.9	17.8	15.7	17.0
16	---	---	---	.9	.1	.2	12.5	9.4	10.7	17.6	15.7	16.7
17	---	---	---	.3	.1	.1	12.8	7.1	9.8	16.2	14.1	15.3
18	---	---	---	.5	.1	.3	10.9	7.1	9.7	15.8	13.6	14.9
19	---	---	---	1.0	.1	.3	10.1	5.3	7.6	15.4	12.9	14.4
20	---	---	---	2.1	.1	1.2	12.7	7.2	9.6	15.2	13.2	14.5
21	---	---	---	4.8	1.0	2.7	13.9	8.5	10.9	15.7	12.8	14.6
22	---	---	---	6.0	1.4	3.5	14.2	9.8	11.7	16.5	13.1	15.0
23	---	---	---	7.9	2.1	4.7	13.5	9.7	11.5	15.8	13.1	14.8
24	---	---	---	9.3	3.3	6.1	12.5	9.5	10.8	15.7	12.1	14.2
25	---	---	---	9.1	4.7	6.8	14.1	8.4	11.1	15.7	13.2	14.7
26	---	---	---	8.7	5.1	6.8	14.7	11.3	12.8	16.0	13.0	14.6
27	---	---	---	7.5	5.2	6.3	16.2	11.4	13.7	15.1	12.8	13.7
28	---	---	---	5.9	4.8	5.5	16.1	11.7	13.7	14.6	12.4	13.7
29	---	---	---	5.2	4.6	5.0	14.9	11.7	13.1	15.4	11.8	13.8
30	---	---	---	6.2	4.3	5.2	13.7	12.1	12.7	16.3	12.1	14.4
31	---	---	---	7.8	3.8	5.8	---	---	---	15.7	13.1	14.8
MONTH	---	---	---	---	---	---	16.2	4.8	9.6	17.8	8.7	13.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	15.8	12.8	14.6	20.3	17.4	19.0	26.2	19.8	23.1	21.2	17.0	18.9
2	16.0	13.4	14.9	20.2	17.8	19.2	24.8	19.6	22.4	21.6	17.0	19.1
3	15.2	12.5	13.9	19.6	16.1	17.6	24.9	18.2	21.5	21.7	16.1	18.9
4	14.9	12.3	13.7	17.4	16.0	16.7	22.4	19.2	20.5	19.8	15.8	18.1
5	15.9	14.0	14.9	18.7	15.4	17.1	23.2	17.3	20.0	20.2	16.1	18.2
6	15.7	13.1	14.6	18.1	16.2	17.3	24.7	18.4	21.4	21.4	16.3	18.7
7	14.6	12.6	13.5	18.5	16.0	17.2	23.4	19.8	21.7	21.4	16.9	18.8
8	15.8	12.2	14.0	19.4	17.2	18.3	23.3	19.2	20.9	21.9	15.8	18.7
9	16.5	14.3	15.5	20.0	16.8	18.3	23.5	19.4	21.4	22.0	16.5	19.0
10	17.0	13.8	15.5	20.6	17.4	18.7	22.9	20.4	21.3	21.5	15.9	18.8
11	17.1	15.6	16.4	21.9	17.5	19.5	24.0	18.4	21.1	21.6	15.9	18.6
12	17.6	15.9	16.8	21.5	18.5	20.0	24.0	19.4	21.5	18.4	16.4	17.5
13	18.0	15.4	17.0	22.0	18.5	20.1	23.0	18.5	20.9	17.9	13.9	16.1
14	19.5	15.9	17.7	22.6	18.8	20.4	21.4	18.9	20.1	18.2	11.7	14.8
15	19.4	16.6	18.2	21.3	18.4	19.6	21.5	17.1	19.3	18.3	12.7	15.3
16	18.6	15.7	17.6	20.9	17.2	18.9	22.1	17.9	19.9	16.6	14.2	15.3
17	18.3	16.1	17.2	21.5	16.9	19.0	20.1	17.4	18.6	17.3	13.2	15.1
18	18.1	15.7	16.9	22.5	17.1	19.6	---	---	---	17.3	13.8	15.5
19	18.3	15.2	17.0	23.0	16.9	19.9	22.6	18.2	20.7	18.2	13.2	15.6
20	18.9	15.0	17.1	22.8	18.0	20.3	22.7	16.7	19.5	18.3	13.2	15.7
21	18.8	15.5	17.4	21.6	17.6	19.5	22.8	18.8	21.0	18.2	13.3	15.8
22	18.9	15.3	17.5	20.4	17.0	18.7	23.3	18.3	20.9	18.7	13.7	16.0
23	18.6	16.4	17.7	19.1	17.3	18.2	22.9	17.3	20.1	18.8	13.8	16.2
24	18.3	14.6	16.6	21.6	16.4	18.8	23.7	17.3	20.4	17.9	13.3	15.8
25	18.8	15.3	17.3	23.4	17.7	20.3	20.9	17.5	18.6	16.8	12.3	14.7
26	19.0	15.8	17.6	21.4	18.7	19.8	21.3	16.5	18.7	17.3	11.8	14.5
27	19.5	16.4	18.1	22.5	16.4	19.4	21.9	16.9	19.5	17.3	11.8	14.5
28	19.0	16.7	18.1	24.4	17.6	20.8	22.6	17.4	19.8	17.3	11.8	14.6
29	19.3	16.2	18.0	23.7	18.7	21.4	20.1	16.6	18.6	17.8	11.8	14.7
30	19.4	17.0	18.4	26.7	19.2	22.6	19.4	15.5	17.6	16.5	11.9	14.3
31	---	---	---	25.7	20.8	23.2	21.0	15.5	18.0	---	---	---
MONTH	19.5	12.2	16.5	26.7	15.4	19.3	---	---	---	22.0	11.7	16.6

## GREEN RIVER BASIN

105

09309600 FAIRVIEW TUNNEL NEAR FAIRVIEW, UT  
(Transmountain diversion)

LOCATION.--Lat 39°40'03", long 111°18'41", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 25, T. 13 S., R. 5 E., Sanpete County,  
Hydrologic Unit 14060007, on right bank 1,000 ft upstream from tunnel portal, 7.3 mi east-northeast of Fairview.

PERIOD OF RECORD.--July 1967 to current year. Seasonal records only. (July to September 1967, gage height only.)

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 8,660 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Fairview Tunnel diverts from San Rafael River and Price River drainages in the Colorado River Basin to San Pitch River in the Great Basin. Due to the location of the gage, reported flow may not be actual flow through tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 66 ft<sup>3</sup>/s June 17, 1993, gage height, 2.46 ft; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.00	e1.9	16	6.3	18	19
2	---	---	---	---	---	---	e.00	e2.0	16	9.2	16	19
3	---	---	---	---	---	---	e.00	e2.7	17	21	17	19
4	---	---	---	---	---	---	e.00	e2.7	22	19	17	20
5	---	---	---	---	---	---	e.00	e2.5	26	16	16	19
6	---	---	---	---	---	---	e.00	e2.3	24	15	16	18
7	---	---	---	---	---	---	e.00	e2.1	24	15	16	18
8	---	---	---	---	---	---	e.00	e2.0	23	15	15	18
9	---	---	---	---	---	---	e.00	e2.0	22	18	15	18
10	---	---	---	---	---	---	e.00	e2.5	22	18	15	18
11	---	---	---	---	---	---	e.00	e4.0	22	14	14	4.0
12	---	---	---	---	---	---	e.00	e5.0	23	13	14	.36
13	---	---	---	---	---	---	e.00	e6.0	24	12	15	.30
14	---	---	---	---	---	---	e.00	e8.0	27	12	16	.30
15	---	---	---	---	---	---	e.00	e10	30	15	15	.30
16	---	---	---	---	---	---	e.00	e15	39	16	15	.30
17	---	---	---	---	---	---	e.00	e17	54	15	15	.36
18	---	---	---	---	---	---	e.05	e17	48	16	15	.36
19	---	---	---	---	---	---	e.10	e20	39	16	14	.30
20	---	---	---	---	---	---	e.10	e20	36	16	15	.36
21	---	---	---	---	---	---	e.10	e22	33	16	15	.30
22	---	---	---	---	---	---	e.20	e21	32	16	14	.30
23	---	---	---	---	---	---	e.70	e23	12	17	14	.30
24	---	---	---	---	---	---	e.80	e25	5.2	17	15	.30
25	---	---	---	---	---	---	e.80	e26	4.7	15	17	.30
26	---	---	---	---	---	---	e.80	e27	5.0	15	19	.30
27	---	---	---	---	---	---	e1.0	31	5.8	15	18	.36
28	---	---	---	---	---	---	e1.5	28	5.4	15	19	.30
29	---	---	---	---	---	---	e1.7	23	5.6	16	19	.30
30	---	---	---	---	---	---	e1.6	21	5.4	17	19	.30
31	---	---	---	---	---	---	---	18	---	17	18	---
TOTAL	---	---	---	---	---	---	9.45	409.7	668.1	473.5	496	196.00
MEAN	---	---	---	---	---	---	.31	13.2	22.3	15.3	16.0	6.53
MAX	---	---	---	---	---	---	1.7	31	54	21	19	20
MIN	---	---	---	---	---	---	.00	1.9	4.7	6.3	14	.30
AC-FT	---	---	---	---	---	---	19	813	1330	939	984	389

e Estimated

## GREEN RIVER BASIN

09310000 GOOSEBERRY CREEK NEAR SCOFIELD, UT

LOCATION.--Lat 39°42'57", long 111°17'58", in NW¼, SE¼, SW¼, sec. 6, T. 13 S., R. 6 E., Sanpete County, Hydrologic Unit 14060007, on left bank 300 ft downstream from old Mammoth Dam, 5.5 mi upstream from mouth, and 7 mi west of Scofield.

DRAINAGE AREA.--16.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1930 to September 1931, May 1940 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,400 ft above sea level, from topographic map. October 1930 to September 1931, at different datum, May 1940 to September 1954, at datum 0.50 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Transmountain diversion above station for irrigation in Sevier River basin, part of which is water diverted into Gooseberry Creek from Boulder Creek. A small reservoir on Gooseberry Creek 5 mi above station, capacity about 1,900 acre-ft is used to regulate these diversions. Flow also affected by small reservoir 1 mi above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 419 ft<sup>3</sup>/s May 22, 1984; maximum gage height, 3.37 ft May 27, 1986; no flow Nov. 11, 1964, Sept. 23-26, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 376 ft<sup>3</sup>/s May 21, gage height, 3.51 ft; minimum daily discharge, .92 ft<sup>3</sup>/s Nov. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	6.0	e1.0	3.8	3.2	4.0	7.9	39	150	21	6.7	4.1
2	2.8	6.1	e1.0	e3.6	3.3	4.2	8.8	51	136	20	6.6	3.9
3	2.5	5.9	e1.0	3.4	3.1	4.7	8.0	68	129	19	6.5	3.8
4	2.3	5.6	e1.0	e3.3	3.0	4.9	8.5	76	99	19	6.4	3.9
5	2.5	5.5	1.1	e3.2	3.2	4.7	8.6	53	93	19	6.8	3.8
6	2.5	5.4	1.1	3.1	3.3	4.6	8.5	43	89	18	7.1	4.0
7	2.5	4.6	1.1	e3.1	3.5	4.7	10	43	85	16	7.3	4.1
8	2.8	3.1	1.1	e3.2	3.7	4.8	9.8	37	81	16	12	3.8
9	2.7	3.0	1.1	3.2	4.0	4.8	7.6	32	69	16	8.6	3.7
10	2.8	2.9	e2.0	3.1	3.9	4.8	7.5	35	59	15	8.2	3.5
11	2.8	3.0	e2.3	e3.0	3.6	5.0	7.8	52	56	15	8.7	3.6
12	3.0	3.1	e2.8	e3.0	3.7	5.0	7.8	80	55	14	7.1	3.3
13	2.9	3.1	e2.9	e3.0	3.8	5.0	7.3	107	54	13	6.2	3.2
14	2.8	3.1	e2.8	3.1	e3.9	5.4	8.7	135	55	11	5.7	3.7
15	2.7	3.1	2.8	2.9	e3.8	6.3	7.9	162	55	11	5.5	3.8
16	2.7	2.1	e2.9	e2.8	4.0	4.9	7.6	205	55	11	5.3	4.0
17	2.8	.98	e2.9	2.8	4.4	5.1	9.4	226	65	11	5.0	4.0
18	2.8	.98	e2.7	2.7	4.2	5.9	13	239	59	10	5.2	4.5
19	2.9	.98	e2.6	e2.7	4.3	5.1	12	241	53	10	5.4	4.8
20	2.9	1.0	e2.3	2.7	e4.2	4.9	12	269	49	9.9	5.5	4.8
21	3.0	.98	e2.6	2.7	e4.1	4.8	13	307	47	8.9	6.0	4.2
22	5.1	e.98	e2.9	e2.8	e4.1	5.2	18	308	43	9.1	5.0	4.1
23	7.9	e.98	3.0	e2.8	e4.2	5.6	23	298	38	9.9	4.9	4.1
24	7.6	e.96	e3.0	2.8	e4.2	5.6	22	280	30	13	4.6	3.8
25	7.2	e.92	e3.2	2.7	e4.0	6.4	20	268	29	10	4.6	3.9
26	6.7	e.98	e3.1	2.7	e3.5	8.1	24	262	27	9.1	5.9	4.0
27	6.4	e.96	e3.0	2.9	3.6	8.6	30	259	25	8.9	4.9	3.9
28	6.4	e1.0	e3.2	3.2	3.9	8.5	40	246	24	8.4	4.7	3.9
29	6.4	e1.0	3.6	3.1	---	8.1	45	210	23	7.9	4.2	3.1
30	6.4	e1.0	e3.6	3.2	---	7.8	42	187	22	7.9	3.9	3.9
31	6.3	---	e3.6	3.1	---	8.7	---	168	---	7.3	4.3	---
TOTAL	123.7	79.30	73.3	93.7	105.7	176.6	455.7	4986	1854	395.3	188.7	122.2
MEAN	3.99	2.64	2.36	3.02	3.77	5.70	15.2	161	61.8	12.8	6.09	4.07
MAX	7.9	6.1	3.6	3.8	4.4	8.7	45	308	150	21	12	6.5
MIN	2.3	.92	1.0	2.7	3.0	4.0	7.3	32	22	7.3	3.9	3.2
AC-FT	245	157	145	186	210	350	904	9890	3680	784	374	242

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1993, BY WATER YEAR (WY)

	4.89	4.56	3.79	3.46	3.41	4.20	18.4	99.7	60.1	13.7	7.25	5.01
MEAN	4.89	4.56	3.79	3.46	3.41	4.20	18.4	99.7	60.1	13.7	7.25	5.01
MAX	13.5	11.6	9.00	7.83	7.37	10.6	55.4	239	239	47.9	16.7	14.1
(WY)	1983	1983	1942	1984	1984	1972	1942	1952	1983	1983	1965	1965
MIN	.65	1.92	1.81	1.40	1.40	2.13	3.37	12.9	9.35	3.75	1.96	1.89
(WY)	1979	1991	1960	1960	1960	1963	1975	1977	1992	1977	1977	1977

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1941 - 1993

ANNUAL TOTAL	2613.60	8654.20	
ANNUAL MEAN	7.14	23.7	19.1
HIGHEST ANNUAL MEAN			40.7
LOWEST ANNUAL MEAN			4.65
HIGHEST DAILY MEAN	39	308	419
LOWEST DAILY MEAN	.92	.92	.00
ANNUAL SEVEN-DAY MINIMUM	.97	.97	.06
ANNUAL RUNOFF (AC-FT)	5180	17170	13860
10 PERCENT EXCEEDS	23	55	49
50 PERCENT EXCEEDS	3.0	4.9	5.0
90 PERCENT EXCEEDS	2.1	2.7	2.5

e Estimated

## 107

e Estimated

## GREEN RIVER BASIN

09310700 MUD CREEK BELOW WINTER QUARTERS CANYON, AT SCOFIELD, UT

LOCATION.--Lat 39°43'18", long 111°09'38", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 5, T. 13 S., R. 7 E., Carbon County, Hydrologic Unit 14060007, on left bank 1.3 mi upstream from mouth, 0.1 mi below Winter Quarters Canyon, 0.2 mi upstream from Scofield.

DRAINAGE AREA.--29.1 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1978 to September 1986. October 1990 to current year. Formerly published as "Pleasant Valley Creek below Winter Quarters Canyon, at Scofield, UT."

GAGE.--Water-stage recorder. Elevation of gage is 7,720 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 389 ft<sup>3</sup>/s May 21, 1984, gage height, 3.30 ft; minimum, 1.4 ft<sup>3</sup>/s Sept. 8, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 140 ft<sup>3</sup>/s May 18, gage height, 3.33 ft; minimum daily discharge, 3.2 ft<sup>3</sup>/s Oct. 1, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	5.7	e5.4	e5.2	e4.9	e5.8	9.7	18	69	13	5.4	12
2	3.3	6.6	e5.2	e5.2	e4.8	e5.4	11	20	67	12	5.7	11
3	3.6	6.1	e5.6	e5.0	e4.8	e4.9	9.9	26	61	12	5.7	11
4	3.7	e5.8	e5.2	e4.8	e4.7	e5.8	10	e40	47	11	5.8	11
5	3.6	6.6	e5.2	e4.8	e4.6	e6.4	11	e35	43	11	5.7	13
6	3.4	e6.4	e5.0	e4.9	e4.6	e7.0	10	e32	41	10	6.0	13
7	3.3	6.1	e5.4	e4.9	e4.9	e8.9	10	e30	36	9.7	6.9	11
8	3.3	6.1	e5.6	e5.0	e4.8	e8.4	10	e28	32	8.8	7.9	11
9	3.5	5.5	e5.6	e5.2	e4.8	9.0	11	e26	30	9.1	7.8	10
10	3.2	e5.2	e5.6	e5.2	e5.2	8.6	13	e25	30	11	11	11
11	4.1	e5.3	e5.6	e4.9	e5.2	7.8	13	e35	30	11	10	11
12	3.8	e5.6	e5.8	e4.5	e5.0	e7.0	12	e50	31	10	6.9	12
13	3.8	e5.9	e5.6	e4.7	e4.8	e7.4	11	e62	30	9.3	5.9	11
14	4.4	e5.9	e5.2	e4.8	e4.7	8.0	10	e70	30	7.4	5.8	12
15	4.6	6.0	e5.4	e4.8	e4.7	8.3	10	e90	30	6.0	5.2	11
16	4.5	5.7	e5.2	e4.9	e4.8	8.3	12	e120	30	7.4	5.1	13
17	4.3	5.6	e5.0	e4.9	e5.2	9.1	14	e130	34	7.4	4.8	13
18	4.5	5.9	e4.8	e4.8	e5.0	10	16	e140	28	7.0	5.1	14
19	4.6	6.0	e4.8	e4.8	e5.6	7.9	14	e130	26	6.9	6.0	13
20	4.5	e5.8	e4.3	e4.7	e5.2	8.4	13	e130	25	6.7	6.1	11
21	4.5	e5.8	e4.9	e4.6	e4.8	8.6	13	e120	24	5.9	6.3	13
22	4.5	e5.6	e5.2	e4.8	e4.7	9.0	15	e120	23	6.4	6.3	12
23	4.4	e5.4	e5.6	e4.6	e4.7	9.9	16	e110	21	7.4	6.2	12
24	4.7	e5.2	e5.2	e4.6	e5.2	9.8	15	e110	20	9.0	6.3	12
25	5.8	e4.8	e5.4	e4.4	e5.0	11	14	e105	19	6.3	7.1	12
26	5.7	e5.3	e5.0	e4.6	e5.2	11	16	e100	18	6.1	8.5	11
27	5.2	e5.2	e4.8	e4.6	e5.4	11	18	94	17	5.8	8.9	9.5
28	5.5	e5.4	e5.2	e4.7	e5.6	10	19	92	15	5.4	10	11
29	5.4	e5.4	e5.2	e4.6	---	11	20	83	14	5.5	11	11
30	6.6	e5.2	e4.9	e4.6	---	10	19	73	13	5.7	9.9	10
31	6.3	---	e4.9	e4.5	---	10	---	70	---	5.6	11	---
TOTAL	135.8	171.1	161.8	148.6	138.9	263.7	395.6	2314	934	255.8	220.3	348.5
MEAN	4.38	5.70	5.22	4.79	4.96	8.51	13.2	74.6	31.1	8.25	7.11	11.6
MAX	6.6	6.6	5.8	5.2	5.6	11	20	140	69	13	11	14
MIN	3.2	4.8	4.3	4.4	4.6	4.9	9.7	18	13	5.4	4.8	9.5
AC-FT	269	339	321	295	276	523	785	4590	1850	507	437	691

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979-86, 1991-93, BY WATER YEAR (WY)

MEAN	6.85	6.29	5.49	5.31	5.49	7.82	18.3	64.8	56.2	14.5	8.44	8.20
MAX	12.2	10.3	9.48	8.74	9.19	18.3	40.7	141	134	30.8	16.0	14.0
(WY)	1985	1986	1985	1986	1984	1986	1985	1984	1983	1983	1984	1986
MIN	2.73	3.35	2.80	1.95	3.00	4.27	9.00	9.19	7.48	3.43	2.91	2.03
(WY)	1979	1980	1980	1980	1979	1979	1979	1992	1992	1981	1992	1979

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1979-86, 1991-93

ANNUAL TOTAL	2137.9	5488.1	
ANNUAL MEAN	5.84	15.0	17.3
HIGHEST ANNUAL MEAN			30.7
LOWEST ANNUAL MEAN			5.52
HIGHEST DAILY MEAN	15	140	300
LOWEST DAILY MEAN	2.2	3.2	1.6
ANNUAL SEVEN-DAY MINIMUM	2.5	3.4	1.6
ANNUAL RUNOFF (AC-FT)	4240	10890	12560
10 PERCENT EXCEEDS	9.4	30	41
50 PERCENT EXCEEDS	5.6	6.6	7.4
90 PERCENT EXCEEDS	3.0	4.7	3.3

e Estimated

## GREEN RIVER BASIN

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## 09311000 SCOFIELD RESERVOIR NEAR SCOFIELD, UT

LOCATION.--Lat 39°47'15", long 111°07'30", in NW¼, SE¼, sec. 10, T. 12 S., R. 7 E., Carbon County, Hydrologic Unit 14060007, on right bank 200 ft upstream from face of dam on Price River and 4.7 mi northeast of Scofield.

DRAINAGE AREA.--154 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1941, April 1942 to current year. Fragmentary records 1926-41 in files of Office of State Engineer.

REVISED RECORDS.--WSP 1089: 1946. WDR UT-77-1: Drainage area.

GAGE.--Staff gage read twice daily. Datum of gage is sea level (levels by Bureau of Reclamation). Prior to Nov. 8, 1945, at site 800 ft upstream 200 ft from old dam at datum 4.51 ft higher.

REMARKS.--Reservoir is formed by earth and rockfill; rock-faced dam 800 ft downstream from old dam in use prior to Nov. 8, 1945. Storage began in May 1926. Usable capacity of reservoir formed by new dam is 65,780 acre-ft between elevations 7,586.0 ft (bottom of outlet works) and 7,617.5 ft (crest of spillway). Dead storage, 8,000 acre-ft below elevation 7,586.0 ft. Figures given herein represent usable contents. Water used for irrigation in vicinity of Price.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 77,280 acre-ft June 12, 13, 1983; elevation, 7,621.85 ft; minimum observed, 280 acre-ft Oct. 3, 1945; elevation, 7,586.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 55,900 acre-ft June 21-24, elevation, 7,613.9 ft; minimum observed, 1,220 acre-ft Oct. 19-26, elevation, 7,587.1 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

7,587	1,100	7,592	7,870	7,600	22,750
7,588	2,290	7,593	9,480	7,605	33,603
7,589	3,550	7,594	11,180	7,610	45,726
7,590	4,910	7,595	12,960	7,614	56,165
7,591	6,340	7,596	14,810		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	1460	2170	2790	3690	4910	6800	12960	48540	54560	44720	37120
2	1340	1570	2170	2790	3820	4910	6950	13330	49570	54300	44470	36880
3	1340	1690	2170	2790	3820	4910	7100	13880	50610	54030	44210	36640
4	1340	1690	2170	2790	3820	4910	7260	14440	51130	53770	43960	36410
5	1340	1690	2170	2920	3820	4910	7410	15200	51660	53500	43710	36170
6	1340	1810	2170	2920	3960	4910	7560	15580	52180	53500	43460	35930
7	1340	1810	2170	2920	3960	4910	7560	e15960	52710	53240	43210	35700
8	1340	1810	2170	2920	3960	4910	7560	e16540	52970	52970	42960	35460
9	1340	1810	2290	2920	3960	4910	7710	e16920	53500	52710	42710	35230
10	1340	1930	2290	3050	3960	5050	7710	17320	53770	52450	42470	35000
11	1340	1930	2290	3050	4100	5050	7870	e17710	54030	51920	42220	34770
12	1340	1930	2290	3050	4100	5050	8030	e18300	54030	51660	41970	34530
13	1340	1930	2290	3170	4100	5190	8190	18700	54300	51130	41730	34300
14	1340	1930	2410	3170	4100	5190	8350	e19900	54560	50870	41480	34070
15	1340	1930	2410	3170	4100	5190	8510	e20910	54830	50610	41230	33840
16	1340	1930	2410	3300	4100	5340	8670	22140	55100	50090	40980	33720
17	1340	1930	2410	3300	4230	5340	8830	23580	55100	49570	40740	33600
18	1340	1930	2540	3300	4230	5340	9000	e25250	55370	49310	40490	33370
19	1220	1930	2540	3300	4230	5480	9160	26940	55630	48800	40250	33260
20	1220	1930	2540	3430	4360	5480	9480	e28890	55630	48540	39770	33150
21	1220	1930	2540	3430	4360	5620	9650	30880	55900	48280	39520	32920
22	1220	2050	2540	3430	4500	5770	9820	e32910	55900	48020	39520	32810
23	1220	2050	2540	3430	4500	5770	10160	e34990	55900	47510	39280	32690
24	1220	2050	2540	3550	4500	5910	10500	37120	55900	47260	39040	32580
25	1220	2170	2670	3550	4630	5910	10670	e38790	55630	47000	38800	32470
26	1220	2170	2670	3690	4630	6050	11010	40500	55630	46740	38550	32240
27	1340	2170	2670	3690	4770	6200	11360	41970	55630	46490	38310	32120
28	1340	2170	2670	3690	4770	6340	11710	43710	55370	45980	38070	32010
29	1340	2170	2670	3690	---	6500	12240	45220	55100	45470	37830	31900
30	e1340	2170	2790	3690	---	6650	12600	46490	55100	45220	37600	31780
31	e1460	---	2790	3690	---	6800	---	47510	---	44970	37360	---
MAX	1460	2170	2790	3690	4770	6800	12600	47500	55900	54600	44700	37100
MIN	1220	1460	2170	2790	3690	4910	6800	13000	48500	45000	37400	31800
(#)	---	7587.9	7588.4	7589.1	7589.9	7591.3	7594.8	7610.7	7613.6	7609.7	7606.6	7604.2
(*)	+130	+710	+620	+900	+1080	+2030	+5800	+34910	+7590	-10130	-7610	-5580

CAL YR 1992 . . . . . (\*) -5390  
WTR YR 1993 . . . . . (\*) +30450

(e) Estimated.  
(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.



## GREEN RIVER BASIN

09312600 WHITE RIVER BELOW TABBYUNE CREEK, NEAR SOLDIER SUMMIT, UT

LOCATION.--Lat 39°52'33", long 111°02'12", in NE1/4, SE1/4, SW1/4, sec. 9, T. 11 S., R. 8 E., Utah County, Hydrologic Unit 14060007, 50 ft downstream from bridge on U.S. Highways 6-50, 1.5 mi downstream from Tabbyune Creek, 2.5 mi northwest of the Colton railroad siding, and 4.5 mi southeast of Soldier Summit.

DRAINAGE AREA.--75.6 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,230 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 962 ft<sup>3</sup>/s May 27, 1983, gage height, 5.82 ft; no flow many days August and September 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 4	1533	226	2.75	May 18	0137	*394	*3.50

Minimum daily discharge, 1.3 ft<sup>3</sup>/s Oct. 8.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.5	4.8	e3.9	e3.1	e3.2	e3.7	39	177	129	28	8.1	5.2
2	e1.6	5.3	e3.8	e3.1	e3.1	e3.5	43	184	120	26	7.7	4.7
3	e1.6	e4.6	e4.0	e3.0	e3.1	e3.3	38	200	123	25	7.6	4.4
4	e1.6	e4.7	e3.7	e2.9	e3.0	e3.8	42	222	104	24	7.6	4.3
5	e1.5	4.8	e3.7	e2.9	e3.0	e4.5	53	213	101	24	8.0	5.2
6	e1.4	4.7	e3.4	e3.0	e3.0	e5.4	46	198	94	22	8.1	5.1
7	e1.4	4.7	e3.5	e3.0	e3.2	e6.0	40	196	87	21	7.7	4.6
8	1.3	e4.7	e3.6	e3.1	e3.1	e5.6	41	178	83	20	14	4.1
9	1.5	e4.6	e3.6	e3.2	e3.1	e5.8	48	164	76	19	10	4.1
10	1.6	e4.4	e3.6	e3.2	e3.3	e5.6	59	158	71	18	12	3.8
11	1.8	e4.5	e3.6	e3.0	e3.3	e5.2	64	176	67	17	15	3.7
12	1.7	e4.6	e3.8	e2.9	e3.2	e4.7	66	219	63	17	10	3.5
13	1.9	e5.0	e3.5	e3.1	e3.1	e5.0	61	272	60	16	8.3	3.5
14	1.9	e5.4	e3.3	e3.2	e3.0	e5.2	60	309	57	15	7.6	3.9
15	1.9	e5.6	e3.5	e3.2	e3.0	e5.2	62	327	54	14	7.3	4.2
16	2.0	5.6	e3.4	e3.3	e3.2	e5.2	72	356	51	14	6.8	4.2
17	2.2	5.7	e3.3	e3.3	e3.3	e5.4	91	372	56	13	6.5	5.1
18	2.2	4.9	e3.2	e3.2	e3.1	e6.2	111	381	50	13	6.4	5.8
19	2.4	4.5	e3.2	e3.2	e3.4	e5.5	96	360	46	13	6.4	5.4
20	2.3	4.6	e2.8	e3.0	e3.3	e7.0	86	347	44	12	6.6	4.7
21	2.4	e4.6	e3.1	e2.9	e3.2	e7.0	91	343	46	11	8.0	4.5
22	2.6	e4.3	e3.2	e3.0	e3.1	e8.0	116	326	43	11	6.3	4.1
23	2.7	e4.1	e3.3	e2.9	e3.1	e11	135	296	39	12	5.9	4.1
24	2.7	e3.8	e3.1	e2.9	e3.3	e11	132	268	36	14	5.6	4.2
25	3.2	e3.7	e3.2	e2.8	e3.2	e16	126	240	35	12	5.3	4.3
26	3.5	e3.9	e3.0	e3.0	e3.3	e30	140	217	33	11	5.9	4.2
27	3.5	e3.8	e2.9	e3.0	e3.4	e59	158	200	33	11	5.9	4.1
28	3.6	e3.9	e3.1	e3.1	e3.5	e54	175	183	31	9.8	5.3	4.1
29	4.3	e3.9	e3.1	e3.0	e3.0	e50	181	164	30	9.3	5.0	4.1
30	4.6	e3.7	e3.0	e3.0	---	44	181	149	30	9.6	4.9	4.1
31	5.6	---	e3.0	e2.8	---	38	---	137	---	8.5	5.1	---
TOTAL	74.0	137.4	104.4	94.3	89.1	429.8	2653	7532	1892	490.2	234.9	131.3
MEAN	2.39	4.58	3.37	3.04	3.18	13.9	88.4	243	63.1	15.8	7.58	4.38
MAX	5.6	5.7	4.0	3.3	3.5	59	181	381	129	28	15	5.8
MIN	1.3	3.7	2.8	2.8	3.0	3.3	38	137	30	8.5	4.9	3.5
AC-FT	147	273	207	187	177	853	5260	14940	3750	972	466	260

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1993, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	5.75	5.31	4.43	4.17	5.08	12.9	64.6	159	56.2	15.7	7.29	5.00														
MAX	11.9	9.91	8.16	7.68	20.3	55.0	169	416	209	41.2	22.8	11.7														
(WY)	1985	1983	1984	1984	1986	1986	1986	1984	1983	1983	1983	1980														
MIN	1.60	2.06	1.46	1.64	1.90	2.73	5.68	4.37	1.95	1.48	0.16	0.12														
(WY)	1978	1991	1977	1977	1969	1991	1977	1977	1977	1977	1977	1977														

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1968 - 1993

	1992	1993	1968-1993
ANNUAL TOTAL	2160.10	13862.4	
ANNUAL MEAN	5.90	38.0	
HIGHEST ANNUAL MEAN			28.9
LOWEST ANNUAL MEAN			61.9
HIGHEST DAILY MEAN			2.21
LOWEST DAILY MEAN	23	381	927
ANNUAL SEVEN-DAY MINIMUM	.27	1.3	.00
ANNUAL RUNOFF (AC-FT)	.48	1.5	.00
10 PERCENT EXCEEDS	16	136	20940
50 PERCENT EXCEEDS	3.5	5.2	76
90 PERCENT EXCEEDS	.99	3.0	6.6
			2.4

e Estimated

## GREEN RIVER BASIN

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09313000 PRICE RIVER NEAR HEINER, UT

LOCATION.--Lat 39°43'08", long 110°51'55", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 1, T. 13 S., R. 9 E., Carbon County, Hydrologic Unit 14060007, on left bank 0.7 mi north of Heiner and 0.8 mi downstream from Willow Creek.

DRAINAGE AREA.--455 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1934 to September 1969, October 1979 to September 1981, October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,000 ft above sea level, from topographic map. Prior to September 1969 at present site at datum 2.00 ft lower. October 1979 to September 1981 a water-stage recorder at site 400 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow affected by regulation of Scofield Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,340 ft<sup>3</sup>/s Sept. 13, 1940, gage height, 7.98 ft, from rating curve extended above 750 ft<sup>3</sup>/s on basis of slope-area measurements of peak flow; minimum recorded, 0.4 ft<sup>3</sup>/s Aug. 21, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 758 ft<sup>3</sup>/s May 18, gage height, 5.97 ft; minimum daily discharge 4.6 ft<sup>3</sup>/s Oct. 2

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5.0	16	e7.0	e8.4	e8.3	8.3	81	311	224	213	151	122
2	e4.6	20	e6.8	e8.9	e8.0	6.0	91	318	212	209	144	121
3	e5.8	15	e7.6	e8.6	e8.0	5.6	82	342	225	207	160	121
4	e6.1	10	e7.4	e8.4	e7.9	5.7	92	393	224	213	162	126
5	e6.5	14	e7.2	e8.5	e8.0	5.7	117	394	198	210	164	124
6	e7.5	9.7	e7.2	e8.4	e8.0	9.5	98	368	190	202	176	121
7	e7.9	12	e7.9	e8.6	e8.4	11	82	364	184	203	173	119
8	e8.5	11	e7.4	e8.7	e8.4	11	85	318	176	201	183	117
9	7.8	8.8	e7.4	e8.9	e8.5	12	96	277	179	217	180	116
10	7.7	5.3	e7.9	e8.6	e8.6	14	113	253	172	225	177	119
11	8.0	e5.0	e7.9	e8.2	e8.6	16	121	274	169	222	181	110
12	7.7	e5.4	e8.0	e7.9	e8.4	16	121	348	184	214	166	107
13	10	e5.6	e7.6	e8.2	e8.3	15	111	450	177	213	147	106
14	13	e5.8	e7.6	e8.4	e8.2	17	109	533	171	215	143	109
15	14	e6.4	e8.0	e8.5	e8.0	18	109	555	168	225	134	103
16	14	e6.2	e7.6	e8.2	e8.3	19	120	658	172	221	130	109
17	15	e6.2	e7.2	e8.3	e8.7	21	144	715	189	223	144	111
18	15	e6.4	e7.4	e8.3	e8.4	31	177	736	190	226	145	101
19	14	e6.2	e7.0	e8.3	e9.0	34	161	702	177	220	148	93
20	14	e5.9	e6.6	e8.2	e9.6	31	148	689	171	220	150	81
21	14	6.0	e7.0	e7.8	9.8	38	148	697	171	217	153	81
22	15	e5.6	e7.4	e7.9	9.6	50	178	658	185	216	149	81
23	14	5.2	e8.0	e7.7	11	53	222	605	179	219	143	82
24	14	e5.0	e7.8	e7.7	10	63	222	526	187	217	129	82
25	15	e4.7	e8.1	e7.9	9.9	73	213	464	183	196	134	84
26	14	e5.4	e7.7	e7.9	9.9	89	231	425	194	184	138	79
27	12	e5.2	e7.4	e8.3	9.9	104	273	396	197	170	136	78
28	12	e6.0	e8.0	e8.6	9.9	109	302	366	193	165	130	80
29	15	e5.8	e8.4	e8.3	---	116	316	320	201	152	124	65
30	19	e6.1	e8.4	e8.5	---	99	320	282	215	153	125	62
31	21	---	e8.4	e8.3	---	82	---	249	---	150	127	---
TOTAL	357.1	235.9	235.3	257.4	247.6	1182.8	4683	13986	5657	6338	4646	3010
MEAN	11.5	7.86	7.59	8.30	8.84	38.2	156	451	189	204	150	100
MAX	21	20	8.4	8.9	11	116	320	736	225	226	183	126
MIN	4.6	4.7	6.6	7.7	7.9	5.6	81	249	168	150	124	62
AC-FT	708	468	467	511	491	2350	9290	27740	11220	12570	9220	5970

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935-69, 1980-81, 1991-93, BY WATER YEAR (WY)

	MEAN	42.2	17.6	12.4	10.1	13.6	39.1	161	346	251	192	131	87.0
MAX	143	90.7	30.1	18.4	29.0	181	523	1538	913	297	207	178	
(WY)	1938	1938	1966	1953	1943	1969	1952	1952	1952	1952	1950	1968	
MIN	3.84	3.23	4.00	4.00	5.46	7.96	29.0	80.2	52.3	28.1	12.6	6.39	
(WY)	1935	1935	1935	1935	1961	1991	1961	1961	1961	1961	1992	1992	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1935-69, 1980-81, 1991-93

ANNUAL TOTAL	13089.1	40836.1	109	
ANNUAL MEAN	35.8	112	310	1952
HIGHEST ANNUAL MEAN			25.3	1961
LOWEST ANNUAL MEAN			2040	Apr 28 1952
HIGHEST DAILY MEAN	185	May 9		
LOWEST DAILY MEAN	3.0	Sep 16	4.6	Oct 2
ANNUAL SEVEN-DAY MINIMUM	4.6	Sep 10	5.3	Nov 21
ANNUAL RUNOFF (AC-FT)	25960		81000	78970
10 PERCENT EXCEEDS	116		228	253
50 PERCENT EXCEEDS	13		81	50
90 PERCENT EXCEEDS	5.9		7.2	8.0

e Estimated

## GREEN RIVER BASIN

09314500 PRICE RIVER AT WOODSIDE, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1946 to September 1949, February 1951 to September 1988, November 1991 to July 1992.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1951 to September 30, 1978.

WATER TEMPERATURES: February 1951 to September 1959, November 1961 to September 1963, October 1964 to Sept. 30, 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 8,540 microsiemens Dec. 11, 1951; minimum daily, 814 microsiemens June 1, 1952.

WATER TEMPERATURES: Maximum, 32.0°C July 10, 11, 1954 and Apr. 7, 1977; minimum, 0.0°C on many days during winter period each year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)
NOV , 1992						
16...	0940	11	4750	8.4	6.5	2.0
FEB , 1993						
25...	0940	44	1810	8.5	4.0	2.0
MAR						
26...	1300	107	2440	8.3	18.0	13.0
MAY						
21...	1030	800	900	8.4	22.5	17.0
JUN						
23...	1040	40	2600	8.4	27.0	20.0

DATE	TIME	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
NOV , 1992		
16...	0940	3
FEB , 1993		
25...	0940	3
MAR		
26...	1300	7
MAY		
21...	1030	2
JUN		
23...	1040	2

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LOCATION.--Lat 38°59'10", long 110°09'02", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 15, T. 21 S., R. 16 E., Emery County, Hydrologic Unit 14060008, on right bank 100 ft upstream from site of old highway bridge, 500 ft upstream from railroad bridge, 1.1 mi southeast of town of Green River, 22.5 mi upstream from San Rafael River, at mile 117.4 upstream from mouth.

WATER-DISCHARGE RECORDS

REVISED RECORDS.--WSP 918: 1895-1900. WDR UT-76-1: Drainage area.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation above station. Flow regulated by Flaming Gorge Reservoir (see station 09234400) since Nov. 1, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 17,000 ft<sup>3</sup>/s and maximum (\*):

Minimum discharge, 705 ft<sup>3</sup>/s Dec. 8.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1620	2150	1530	e1500	1860	2310	7100	5630	24400	8790	2930	1980
2	1560	2300	1520	e1600	1850	2280	6280	6670	23300	8820	2710	1900
3	1470	2430	1380	e1700	1870	2270	5650	8080	22000	8620	2620	2050
4	1420	2240	1470	e1600	1870	2240	5410	7720	21600	8550	2480	2090
5	1410	2240	1570	e1500	1900	2240	4900	7700	21900	8140	2450	2060
6	1410	2260	1400	e1600	1980	2240	4920	7400	21400	7720	2320	2100
7	1430	2180	957	e1690	2020	2310	5450	7470	20600	7490	2260	1990
8	1420	2180	879	e1800	2050	2350	6060	8110	18700	7160	2210	2050
9	1440	2160	1020	e1970	2020	2380	5670	9520	16800	6450	2160	1980
10	1440	2140	945	e2100	2080	2430	5300	10400	15900	5870	2110	1940
11	1450	2050	1150	e2040	1990	2530	5640	9190	15800	5350	2360	2000
12	1500	2050	1580	e1990	2000	2690	5290	8360	14800	4970	2460	1970
13	1550	2060	1890	e2100	2030	2880	4640	7800	14500	4780	2500	1990
14	1590	2100	e1800	e2220	2050	3050	4390	7280	13700	4760	2560	1920
15	1630	2090	e1690	e2310	2090	3210	4360	7410	13300	4580	2620	1930
16	1640	2070	e1670	e2410	2140	3320	4380	9790	14000	4460	2420	1950
17	1610	2050	e1550	e2320	2140	3420	4310	13400	15000	4360	2330	1960
18	1650	2060	e1530	2330	2080	4090	4230	17100	15800	4260	2280	1970
19	1690	2040	e1490	2190	2110	5610	4120	e20200	16500	4120	2250	2010
20	1660	2050	e1410	2310	2090	9370	4090	e21100	17000	3940	2170	2060
21	1670	2090	e1380	2210	2130	8250	4200	21600	16700	3720	2140	2060
22	1690	2100	e1400	2150	1990	6430	4180	21100	15600	3580	2110	2120
23	1680	2100	e1410	2390	2040	5980	4310	21500	14300	3380	2370	2200
24	1650	2090	e1400	2230	2170	5590	4600	23100	13500	3200	2490	2190
25	1720	2070	e1440	2200	2240	4960	4760	23900	12900	3070	2360	2160
26	1700	2030	e1470	2190	2250	4650	4610	24000	12400	2980	2280	2170
27	1740	1810	e1490	2150	2320	4560	4440	23000	11500	2940	2250	2170
28	1780	1710	e1500	2090	2280	4580	4620	22300	e10400	2970	2080	2120
29	2070	1600	e1500	2090	---	4510	5240	23300	e9450	2980	2010	2100
30	1990	1580	e1480	1900	---	5710	5320	24600	e8970	2880	2100	2070
31	2120	---	e1450	1870	---	7380	---	25100	---	3060	2080	---
TOTAL	50400	62080	44351	62750	57640	125820	148470	453830	482720	157950	72470	61260
MEAN	1626	2069	1431	2024	2059	4059	4949	14640	16090	5095	2338	2042
MAX	2120	2430	1890	2410	2320	9370						

MEAN	3026	2871	2320	2289	2824	4637	7452	15590	18990	7993	3747	2840
MAX	7701	6490	5894	5739	7258	11430	18370	33940	46650	31630	11220	9960
(WY)	1983	1987	1987	1985	1962	1910	1962	1952	1921	1907	1907	1909
MIN	718	935	801	1000	1509	1617	2591	4212	2128	645	712	603
(WY)	1935	1935	1909	1910	1935	1963	1963	1990	1934	1934	1934	1934

ANNUAL TOTAL	1096651		1779741			
ANNUAL MEAN	2996		4876		6221	
HIGHEST ANNUAL MEAN					12280	1907
LOWEST ANNUAL MEAN					1805	1934
HIGHEST DAILY MEAN	10700	May 14	25100	May 31	66700	Jun 27 1917
LOWEST DAILY MEAN	879	Dec 8	879	Dec 8	380	Dec 5 1934
ANNUAL SEVEN-DAY MINIMUM	1130	Dec 5	1130	Dec 5	419	Jul 30 1934
ANNUAL RUNOFF (AC-FT)	2175000		3530000		4507000	
10 PERCENT EXCEEDS	5130		13600		15200	
50 PERCENT EXCEEDS	2440		2250		3430	
90 PERCENT EXCEEDS	1560		1540		1520	

e Estimated

## GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

LOCATION.--Daily samples collected at bridge on U.S. Highways 50 and 6, in town of Green River, 0.7 mi from gaging station.

PERIOD OF RECORD.--August 1928 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1981, March 1982 to current year.

WATER TEMPERATURES: May 1949 to September 1959, October 1964 to September 1981, March 1982 to current year.

SUSPENDED-SEDIMENT DISCHARGE: May 1930 to September 1984.

INSTRUMENTATION.--Water-quality monitor April 1985 to September 1989 (discontinued).

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,250 microsiemens Dec. 1, 1967; minimum daily, 255 microsiemens June 30, 1978.

WATER TEMPERATURES: Maximum, 30.0°C Aug. 13, 1958; minimum, 0.0°C on many days during winter period each year.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 66,000 mg/L July 11, 1936; minimum daily, 19 mg/L Sept. 30, 1974.

SEDIMENT LOADS: Maximum daily, 2,230,000 tons July 11, 1936; minimum daily, 54 tons Sept. 27, 1956.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 1,100 microsiemens Dec. 8; minimum observed, 340 microsiemens July 5.

WATER TEMPERATURES: Maximum observed, 27.0°C July 31; minimum, 0.0°C many days during winter period.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CaCO3)
OCT, 1992												
13...	1100	1550	860	8.2	10.0	13.5	--	8.3	654	--	--	280
NOV												
24...	1030	2090	930	8.2	-1.0	2.5	48	11.5	658	<1	<1	280
FEB, 1993												
23...	1230	2050	900	8.2	8.0	2.0	--	12.0	655	--	--	300
MAR												
25...	1000	4910	900	8.3	13.5	9.5	670	10.0	660	<1	<1	260
APR												
29...	1100	5100	870	8.5	17.5	15.0	190	8.1	661	<1	<1	310
MAY												
20...	1100	21200	420	8.0	21.0	17.0	1500	7.8	656	<1	<1	150
JUN												
21...	1100	17500	360	8.0	25.0	19.5	130	7.2	655	<1	<1	130
JUL												
20...	1230	3910	475	8.2	33.5	24.0	--	7.0	657	--	--	160
AUG												
26...	1130	2240	850	8.4	25.5	22.0	--	7.0	662	--	--	290

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CaCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT, 1992												
13...	64	29	78	37	2	3.0	--	--	--	230	28	0.30
NOV												
24...	64	30	78	37	2	2.8	0	214	175	260	27	0.30
FEB, 1993												
23...	69	30	78	36	2	2.5	--	--	--	250	30	0.20
MAR												
25...	58	27	92	43	3	3.6	0	191	157	260	31	0.30
APR												
29...	66	34	75	35	2	2.8	5	189	163	260	21	0.30
MAY												
20...	35	15	30	30	1	1.9	0	121	99	96	8.3	0.20
JUN												
21...	31	12	24	29	0.9	1.7	0	110	90	79	7.0	0.20
JUL												
20...	41	15	36	32	1	1.8	--	--	--	110	13	0.20
AUG												
26...	70	27	77	37	2	3.1	--	--	--	240	26	0.30

## GREEN RIVER BASIN

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09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT, 1992											
13...	4.5	485	543	0.66	2030	--	--	--	<0.010	--	<0.050
NOV											
24...	6.1	539	575	0.73	3040	0.100	0.100	<0.010	0.020	0.120	0.120
FEB, 1993											
23...	7.4	592	582	0.81	3280	0.220	0.220	--	0.010	--	0.230
MAR											
25...	7.5	574	577	0.78	7610	0.470	0.470	--	0.020	--	0.490
APR											
29...	8.3	589	568	0.80	8110	0.320	--	--	<0.010	--	0.320
MAY											
20...	9.8	267	257	0.36	15300	0.310	0.310	--	0.010	--	0.320
JUN											
21...	8.7	242	219	0.33	11400	0.097	--	--	<0.010	--	0.097
JUL											
20...	7.8	282	294	0.38	2980	--	--	--	<0.010	--	<0.050
AUG											
26...	6.9	548	554	0.75	3310	0.170	--	--	<0.010	--	0.170

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)
OCT, 1992											
13...	--	0.010	0.01	--	--	--	--	--	--	<0.010	--
NOV											
24...	0.020	<0.010	--	--	<0.20	--	0.100	<0.010	<0.010	<0.010	--
FEB, 1993											
23...	--	<0.010	--	--	--	--	--	--	--	<0.010	--
MAR											
25...	--	0.080	0.10	0.22	0.30	0.79	0.050	<0.010	--	0.030	0.09
APR											
29...	--	0.030	0.04	0.27	0.30	0.62	0.020	0.020	--	<0.010	--
MAY											
20...	--	0.080	0.10	1.5	1.6	1.9	0.820	0.020	--	0.010	0.03
JUN											
21...	--	0.030	0.04	0.17	0.20	0.30	0.030	0.020	--	0.010	0.03
JUL											
20...	--	0.010	0.01	--	--	--	--	--	--	<0.010	--
AUG											
26...	--	0.050	0.06	--	--	--	--	--	--	0.010	0.03

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV, 1992							
24...	1030	<10	67	<3	<3	34	4
MAR, 1993							
25...	1000	30	100	<3	17	30	1
APR							
29...	1100	20	79	<3	4	28	1
JUN							
21...	1100	20	63	<3	40	10	2

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV, 1992					
24...	<10	1	<1.0	820	<6
MAR, 1993					
25...	20	1	<1.0	720	<6
APR					
29...	10	<1	<1.0	700	<6
JUN					
21...	<10	1	<1.0	290	<6



## GREEN RIVER BASIN

09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
OCT, 1992			
13...	1100	160	--
NOV			
24...	1030	--	1
24...	1035	--	2
FEB, 1993			
23...	1230	160	--
MAR			
25...	1000	--	3
25...	1005	--	3
APR			
29...	1100	--	4
MAY			
20...	1105	--	1
JUN			
21...	1100	--	<1
21...	1105	--	<1
JUL			
20...	1230	90	--
AUG			
26...	1130	130	--

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP, TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP, TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP, TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
MAY, 1993									
20...	1100	3.8	130	3.5	69	2.5	65	0.08	1.7

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	790	990	930	930	910	---	1000	---	395	370	650	870
2	790	930	950	910	910	920	1050	770	370	---	660	870
3	---	910	1030	920	920	920	980	710	380	365	640	860
4	800	890	---	900	910	910	970	670	---	345	640	---
5	800	960	1040	---	920	900	---	630	---	340	700	870
6	---	1030	1050	---	910	910	960	600	400	345	700	900
7	810	---	1090	---	920	980	970	600	405	365	690	---
8	820	950	1100	---	920	1000	890	610	415	370	700	860
9	---	950	1090	---	900	930	920	630	455	390	---	870
10	840	920	1070	---	---	930	1090	590	460	---	---	860
11	850	920	---	---	880	---	1040	560	---	410	---	870
12	860	910	1060	---	---	960	---	560	465	430	1040	900
13	870	930	1060	---	910	---	960	570	465	445	820	910
14	880	---	1050	---	920	910	980	580	480	465	---	910
15	890	910	1020	---	910	900	960	590	500	480	840	900
16	920	900	1020	---	900	960	960	590	500	490	900	900
17	---	910	970	---	890	940	970	550	475	480	900	910
18	890	910	960	---	890	920	990	480	450	485	890	900
19	900	930	960	---	870	900	970	460	435	480	870	900
20	890	---	950	870	890	800	970	460	425	485	860	910
21	1010	950	980	880	940	810	930	---	---	485	860	930
22	---	920	990	---	880	---	940	420	370	495	850	910
23	---	920	1010	860	920	---	---	400	370	---	860	920
24	910	910	1010	850	910	950	960	410	375	530	820	930
25	880	910	---	860	910	910	930	420	375	530	840	920
26	900	910	960	860	---	---	900	390	375	560	860	900
27	900	900	---	870	900	960	870	370	360	585	890	870
28	970	---	990	880	920	950	900	370	355	600	930	880
29	1060	930	980	890	---	930	900	400	350	620	900	890
30	960	930	990	900	---	950	---	400	370	650	880	---
31	890	---	950	900	---	880	---	400	---	650	870	---
MEAN	883	928	1010	885	906	921	960	524	414	473	817	893

## GREEN RIVER BASIN

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09315000 GREEN RIVER AT GREEN RIVER, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	11.0	1.0	.0	1.5	---	11.0	---	19.0	23.0	25.0	24.0
2	18.0	11.0	1.0	.0	2.5	3.0	11.0	14.5	18.0	---	25.5	23.0
3	---	9.0	.0	.0	2.0	5.0	12.0	15.0	17.0	22.0	25.0	24.0
4	18.5	8.0	---	.0	2.5	5.0	12.5	14.0	---	21.0	25.0	---
5	18.0	9.0	.0	---	2.5	5.0	---	15.0	---	20.5	25.5	22.5
6	---	8.0	1.0	---	2.5	6.0	10.0	14.0	15.5	22.0	25.0	24.0
7	15.0	---	1.0	---	1.0	7.0	11.5	14.0	15.0	23.0	25.0	---
8	15.0	9.0	1.0	---	1.0	7.0	12.0	12.5	16.0	24.0	25.0	23.0
9	---	7.0	2.0	---	2.0	5.5	12.0	14.5	15.5	24.0	---	23.0
10	14.0	7.0	2.0	---	---	7.0	13.0	15.5	15.0	---	---	23.0
11	15.0	6.0	---	---	3.5	---	14.0	17.0	---	23.0	---	22.0
12	14.0	5.0	.0	---	---	5.5	---	17.5	19.0	23.5	25.0	22.0
13	15.5	5.0	1.0	---	3.0	---	12.0	19.0	20.0	26.0	25.0	20.0
14	15.5	---	.0	---	2.0	5.0	12.0	19.0	19.5	25.0	---	20.0
15	15.5	5.0	.0	---	1.5	5.5	13.0	20.0	20.0	24.0	22.0	19.0
16	15.0	5.0	1.0	---	2.0	7.0	13.0	21.0	22.0	24.0	23.0	19.0
17	---	6.0	.0	---	2.0	6.0	14.0	20.0	20.0	25.0	23.0	19.5
18	14.5	7.0	.0	---	2.0	6.5	15.0	20.5	20.0	25.0	25.0	19.0
19	14.5	6.0	.0	---	4.0	5.5	14.5	19.5	20.0	24.0	24.0	19.0
20	14.0	---	.0	1.5	4.0	3.5	14.0	18.0	20.0	25.0	24.0	19.0
21	14.0	6.0	.0	1.5	3.0	4.0	14.0	---	---	24.5	25.0	18.0
22	---	5.0	.0	---	4.0	---	16.0	18.0	21.0	23.0	23.5	20.0
23	---	5.0	.0	1.0	3.0	---	---	18.0	21.5	---	25.0	19.0
24	16.0	4.0	.0	1.0	3.0	12.0	15.5	20.0	20.0	23.0	25.0	19.0
25	15.0	3.0	---	1.0	3.5	12.0	16.0	19.0	21.0	24.0	22.0	19.0
26	14.5	2.0	.0	1.0	---	---	17.0	19.5	21.0	24.0	24.0	19.0
27	15.0	1.5	---	1.5	4.0	9.5	17.0	17.5	23.0	24.0	24.0	19.0
28	14.0	---	.0	2.0	4.0	11.0	18.0	18.5	23.0	25.0	25.0	19.0
29	13.0	3.0	.0	.0	---	11.5	15.0	18.0	23.0	25.0	24.0	19.0
30	13.0	2.0	.0	1.0	---	11.0	---	19.0	23.5	26.5	23.0	---
31	12.0	---	.0	1.5	---	10.5	---	18.0	---	27.0	22.0	---
MEAN	15.0	6.0	.5	1.0	2.5	7.0	13.5	17.5	19.5	24.0	24.0	20.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
JUN, 1993 21...	1100	17500	19.5	41	1400	66300

## GREEN RIVER BASIN

09317800 ELECTRIC LAKE NEAR SCOFIELD, UT

LOCATION.--Lat 39°36'03", long 111°12'41", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 14, T. 14 S., R. 6 E., Emery County, Hydrologic Unit 14060009, 25 mi northwest of Huntington, 21 mi east of Fairview.

DRAINAGE AREA.--31.0 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1973 to current year. Not published prior to 1986. Records available from Utah Power & Light Co.

GAGE.--Elevation of gage is 8,300 ft above sea level, Utah Power and Light Co. datum.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 22,620 acre-ft July 3, elevation, 8,554.03 ft; minimum, 9,627 acre-ft Apr. 18-24, elevation, 8,505.58 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11320	11020	10730	10450	10200	9944	9680	10210	19790	22620	22300	21320
2	11310	11020	10720	10450	10190	9934	9680	10300	20400	22620	22240	21210
3	11290	11020	10720	10440	10170	9920	9680	10390	20520	22620	22220	21090
4	11280	11010	10700	10430	10160	9902	9680	10470	20630	22610	22180	20990
5	11270	10990	10700	10430	10150	9888	9680	10560	20740	22610	22150	20880
6	11250	10990	10690	10410	10140	9876	9680	10650	20850	22610	22120	20770
7	11240	10980	10680	10410	10130	9864	9680	10740	20970	22600	22090	20660
8	11230	10970	10670	10410	10120	9850	9680	10830	21080	22590	22060	20510
9	11220	10960	10670	10410	10120	9842	9664	10910	21200	22590	22030	20400
10	11200	10950	10650	10400	10110	9828	9654	11000	21310	22580	22000	20270
11	11190	10930	10640	10400	10100	9812	9650	11120	21430	22570	21960	20140
12	11180	10920	10630	10390	10100	9802	9650	11270	21540	22560	21930	20020
13	11170	10910	10620	10390	10080	9788	9642	11520	21660	22550	21900	19910
14	11160	10900	10600	10380	10070	9784	9637	11810	21770	22540	21870	19760
15	11150	10890	10590	10370	10060	9780	9633	12180	21890	22540	21840	19610
16	11140	10870	10580	10360	10050	9770	9633	12610	22010	22530	21810	19460
17	11130	10860	10570	10360	10040	9760	9629	13080	22130	22520	21770	19310
18	11110	10850	10570	10350	10030	9758	9627	13470	22180	22520	21750	19160
19	11100	10840	10570	10340	10030	9748	9627	13860	22250	22500	21720	19010
20	11090	10830	10550	10330	10030	9732	9627	14260	22320	22490	21680	18850
21	11090	10820	10540	10320	10020	9722	9627	14670	22380	22480	21650	18690
22	11080	10820	10530	10310	10010	9716	9627	15090	22430	22470	21620	18640
23	11070	10820	10520	10290	10000	9708	9627	15520	22480	22460	21590	18600
24	11050	10800	10500	10280	10000	9706	9627	15960	22510	22440	21560	18560
25	11050	10790	10490	10270	10000	9704	9710	16400	22540	22430	21530	18520
26	11040	10770	10490	10260	9985	9704	9792	16850	22560	22430	21500	18490
27	11030	10760	10480	10250	9971	9704	9876	17320	22580	22420	21470	18400
28	11030	10750	10470	10240	9957	9704	9961	17790	22590	22390	21440	18350
29	11030	10750	10470	10230	---	9704	10040	18280	22600	22380	21410	18330
30	11030	10730	10470	10210	---	9704	10130	18770	22620	22350	21380	18320
31	11020	---	10460	10210	---	9700	---	19280	---	22330	21340	---
MAX	11320	11020	10730	10450	10200	9944	10130	19280	22620	22620	22300	21320
MIN	11020	10730	10460	10210	9957	9700	9627	10210	19790	22330	21340	18320
(#)	8512.35	8510.99	8509.69	8508.48	8507.23	8505.95	8508.08	8544.13	8554.01	8553.20	8550.40	8541.03
(*)	-350	-290	-270	-250	-253	-257	+430	+9150	+3340	-290	-990	-3020

CAL YR 1992 . . . . . (\*) -4710  
WTR YR 1993 . . . . . (\*) +6950

(#) Elevation, in feet, at end of month.  
(\*) change in contents, in acre-feet.

## GREEN RIVER BASIN

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09317997 HUNTINGTON CREEK NEAR HUNTINGTON, UT

LOCATION.--Lat 39°23'07", long 111°05'15", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 36, T. 16 S., R. 7 E., Emery County, Hydrologic Unit 14060009, on right bank about 500 ft upstream from bridge to Deer Creek Mine, 8 mi northwest of Huntington.

DRAINAGE AREA.--178 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1979 to current year. Water years 1981-85 not published, records available in office of Utah Power & Light Co., located in Salt Lake City, Ut.

GAGE.--Water-stage recorder. Elevation of gage is 6,450 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Small transmountain diversions to tributaries of San Pitch River (Sevier Lake Basin). Flow regulated by reservoirs above station.

COOPERATION.--Records collected by Utah Power & Light Co.

AVERAGE DISCHARGE.--10 years, 75.2 ft<sup>3</sup>/s, 54,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft<sup>3</sup>/s May 24, 1984, gage height, 4.96 ft; minimum, 3.0 ft<sup>3</sup>/s Feb. 2-5, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 629 ft<sup>3</sup>/s May 21, gage height, 4.32 ft; minimum daily discharge, 7.0 ft<sup>3</sup>/s Jan. 23, Feb. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	28	e15	e17	e14	e17	23	63	262	205	94	73
2	11	e32	e16	e16	e11	e16	25	71	243	200	94	71
3	10	e25	e13	e13	e7.0	e13	23	85	234	190	94	70
4	8.8	e21	e11	e11	e8.1	e13	24	101	186	184	101	70
5	8.0	e22	e11	e16	e10	e16	27	77	170	180	101	71
6	8.3	e18	e12	e18	e16	e15	24	69	160	191	96	71
7	10	e18	e13	e17	e16	e14	22	71	144	99	98	71
8	13	e17	e14	e17	e14	e15	24	63	141	93	101	85
9	13	e17	e15	e17	e13	e16	27	54	128	91	108	86
10	15	e11	e16	e16	e15	e16	29	57	124	91	123	80
11	15	e9.9	e15	e13	e16	e17	29	78	128	90	103	82
12	16	e12	e15	e9.2	e16	e14	30	107	134	90	93	85
13	17	e14	e11	e17	e9.3	e15	28	146	152	e115	83	85
14	18	e11	e9.7	e19	e9.2	e16	27	188	162	e115	79	88
15	21	e9.6	e19	e18	e12	17	27	225	201	e114	89	102
16	22	e8.7	e9.8	e16	e15	17	28	270	210	e112	89	99
17	15	e8.7	e12	e16	e18	18	29	379	269	e111	80	102
18	16	e8.9	e16	e16	e14	22	31	408	230	e110	78	104
19	17	e12	e11	e15	e18	19	30	399	210	e109	78	102
20	17	e19	e13	e13	e17	19	29	438	244	e107	83	101
21	18	e17	e16	e16	e14	19	31	495	288	e106	83	123
22	20	e14	e14	e14	e15	20	38	498	269	e105	81	79
23	20	e15	e13	e7.0	e15	21	44	444	243	e104	81	85
24	21	e9.9	e12	e13	e15	22	46	411	213	e102	80	93
25	25	e4.5	e14	e15	e14	23	40	389	186	e101	74	88
26	26	e6.3	e14	e17	e17	23	43	386	181	e100	77	87
27	27	e10	e15	e12	e17	29	51	365	178	e99	72	87
28	26	e19	e17	e13	e16	26	65	357	173	e98	63	88
29	26	e17	e16	e16	---	28	73	313	177	e97	63	88
30	28	e11	e17	e17	---	24	70	290	211	e96	68	75
31	30	---	e15	e16	---	22	---	271	---	e95	62	---
TOTAL	548.1	446.5	430.5	466.2	391.6	582	1037	7568	5851	3700	2669	2591
MEAN	17.7	14.9	13.9	15.0	14.0	18.8	34.6	244	195	119	86.1	86.4
MAX	30	32	19	19	18	29	73	498	288	205	123	123
MIN	8.0	4.5	9.7	7.0	7.0	13	22	54	124	90	62	70
AC-FT	1090	886	854	925	777	1150	2060	15010	11610	7340	5290	5140

CAL YR 1992 TOTAL 14318.1 MEAN 39.1 MAX 200 MIN 4.5 AC-FT 28400  
WTR YR 1993 TOTAL 26280.9 MEAN 72.0 MAX 498 MIN 4.5 AC-FT 52130

e Estimated

## GREEN RIVER BASIN

09319000 EPHRAIM TUNNEL NEAR EPHRAIM, UT  
(Transmountain diversion)

LOCATION.--Lat 39°19'47", long 111°25'51", in SE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, sec. 14, T. 17 S., R. 4 E., Sanpete County, Hydrologic Unit 14060009, at east tunnel portal, 9.0 mi east of Ephraim.

PERIOD OF RECORD.--September 1949 to current year. Monthly discharge only for September 1949 to September 1960; figures of daily discharge available in Salt Lake City District Office, Geological Survey. Seasonal records only since October 1971.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 9,694.9 ft above sea level. (Levels by U.S. Geological Survey, Topographic Division.)

REMARKS.--Records fair except for estimated daily discharges, which are poor. Tunnel diverts from Cottonwood Creek drainage in Colorado River Basin to San Pitch River in the Great Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft<sup>3</sup>/s June 6, 1964, gage height, 5.43 ft; no flow at times in some years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e.00	e2.5	e52	18	4.0	.30
2	---	---	---	---	---	---	e.00	e2.8	e48	16	3.6	.27
3	---	---	---	---	---	---	e.00	e3.7	24	15	3.4	.24
4	---	---	---	---	---	---	e.00	e3.7	29	13	3.3	.22
5	---	---	---	---	---	---	e.00	e3.3	26	12	3.2	.22
6	---	---	---	---	---	---	e.00	e3.1	26	11	2.8	.19
7	---	---	---	---	---	---	e.00	e2.8	23	11	2.6	.19
8	---	---	---	---	---	---	e.00	e2.6	20	11	2.6	.18
9	---	---	---	---	---	---	e.01	e2.6	21	10	2.6	.17
10	---	---	---	---	---	---	e.02	e4.0	27	9.9	4.5	.17
11	---	---	---	---	---	---	e.02	e6.0	29	9.1	3.1	.15
12	---	---	---	---	---	---	e.02	e10	37	8.6	2.5	.15
13	---	---	---	---	---	---	e.02	e15	46	7.9	2.1	.16
14	---	---	---	---	---	---	e.02	e18	51	7.3	1.9	.16
15	---	---	---	---	---	---	e.02	e22	48	6.8	1.8	.15
16	---	---	---	---	---	---	e.02	e27	43	6.4	1.6	.15
17	---	---	---	---	---	---	e.02	e31	23	5.9	1.4	.20
18	---	---	---	---	---	---	e.04	e31	22	5.7	1.3	.20
19	---	---	---	---	---	---	e.10	e35	28	5.5	1.2	.19
20	---	---	---	---	---	---	e.09	e37	32	5.2	1.4	.17
21	---	---	---	---	---	---	e.08	e44	32	5.0	1.3	.16
22	---	---	---	---	---	---	e.40	e42	28	4.8	.97	.15
23	---	---	---	---	---	---	e1.3	e45	23	4.9	.83	.14
24	---	---	---	---	---	---	e1.3	e47	20	5.3	.74	.14
25	---	---	---	---	---	---	e1.3	e50	20	4.7	.75	.14
26	---	---	---	---	---	---	e1.3	e52	25	4.5	.85	.13
27	---	---	---	---	---	---	e1.8	e48	23	4.7	.60	.14
28	---	---	---	---	---	---	e2.3	e44	24	4.8	.53	.13
29	---	---	---	---	---	---	e2.4	e50	23	4.6	.46	.13
30	---	---	---	---	---	---	e2.2	e54	19	4.6	.41	.12
31	---	---	---	---	---	---	---	e62	---	4.3	.37	---
TOTAL	---	---	---	---	---	---	14.78	801.1	892	247.5	58.91	5.21
MEAN	---	---	---	---	---	---	.49	25.8	29.7	7.98	1.90	.17
MAX	---	---	---	---	---	---	2.4	62	52	18	4.5	.30
MIN	---	---	---	---	---	---	.00	2.5	19	4.3	.37	.12
AC-FT	---	---	---	---	---	---	29	1590	1770	491	117	10

e Estimated

## GREEN RIVER BASIN

121

09323000 SPRING CITY TUNNEL NEAR SPRING CITY, UT  
(Transmountain diversion)LOCATION.--Lat 39°25'34", long 111°21'51", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 16, T. 16 S., R. 5 E., Sanpete County, Hydrologic Unit 14060009, at west portal of tunnel, 11 mi east of Spring City.

PERIOD OF RECORD.--October 1949 to current year. Monthly discharges only for October 1949 to September 1960. Figures of daily discharge available from Salt Lake City District Office, Geological Survey. Seasonal records only since October 1971.

GAGE.--Water-stage recorder. Datum of gage is 9,838 ft above sea level. Prior to Aug. 24, 1960, at datum about 0.3 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Tunnel diverts from Cottonwood Creek drainage in Colorado River Basin to San Pitch River in the Great Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 111 ft<sup>3</sup>/s July 23, 1965; possibly no flow at times in some years.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.47	1.8	e42	19	3.2	1.6
2	---	---	---	---	---	---	.47	2.2	e40	18	3.1	1.5
3	---	---	---	---	---	---	.47	3.0	e33	16	3.0	1.4
4	---	---	---	---	---	---	.47	3.0	19	14	3.2	1.5
5	---	---	---	---	---	---	.47	2.4	6.5	12	3.1	1.5
6	---	---	---	---	---	---	.47	2.1	6.1	11	2.9	1.5
7	---	---	---	---	---	---	.47	2.0	6.0	11	2.8	1.4
8	---	---	---	---	---	---	.45	1.9	6.0	10	2.8	1.4
9	---	---	---	---	---	---	.47	1.9	6.0	9.2	2.2	1.4
10	---	---	---	---	---	---	.47	2.1	13	8.8	5.6	1.3
11	---	---	---	---	---	---	.47	2.9	20	8.4	3.0	1.3
12	---	---	---	---	---	---	.47	4.8	24	8.0	3.6	1.3
13	---	---	---	---	---	---	.47	7.9	29	7.5	3.3	1.3
14	---	---	---	---	---	---	.47	9.3	35	7.0	3.4	1.3
15	---	---	---	---	---	---	.47	12	36	6.6	2.4	1.3
16	---	---	---	---	---	---	.47	17	36	6.3	2.3	1.4
17	---	---	---	---	---	---	.47	21	33	5.9	2.2	1.6
18	---	---	---	---	---	---	.50	21	30	5.6	2.1	1.5
19	---	---	---	---	---	---	.52	25	32	5.4	2.2	1.4
20	---	---	---	---	---	---	.52	26	34	5.1	2.2	1.3
21	---	---	---	---	---	---	.51	e34	33	4.9	2.0	1.2
22	---	---	---	---	---	---	.83	e32	34	4.7	2.0	1.2
23	---	---	---	---	---	---	1.4	e35	32	4.7	1.9	1.2
24	---	---	---	---	---	---	1.4	e37	29	5.1	1.8	1.2
25	---	---	---	---	---	---	1.4	e39	27	4.4	1.8	1.1
26	---	---	---	---	---	---	1.4	e40	24	4.2	1.8	1.1
27	---	---	---	---	---	---	1.6	e37	24	4.0	1.7	1.1
28	---	---	---	---	---	---	1.8	e33	23	3.8	1.7	1.0
29	---	---	---	---	---	---	1.9	e38	16	3.7	1.6	1.0
30	---	---	---	---	---	---	1.7	e40	21	3.5	1.6	1.0
31	---	---	---	---	---	---	---	e45	---	3.3	1.6	---
TOTAL	---	---	---	---	---	---	23.45	579.3	749.6	241.1	77.3	39.3
MEAN	---	---	---	---	---	---	.78	18.7	25.0	7.78	2.49	1.31
MAX	---	---	---	---	---	---	1.9	45	42	19	5.6	1.6
MIN	---	---	---	---	---	---	.45	1.8	6.0	3.3	1.6	1.0
AC-FT	---	---	---	---	---	---	47	1150	1490	478	153	78

e Estimated



## GREEN RIVER BASIN

## 09323900 JOES VALLEY RESERVOIR NEAR ORANGEVILLE, UT

LOCATION.--Lat 39°17'20", long 111°16'10", in NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, sec. 5, T. 18 S., R. 6 E., Emery County, Hydrologic Unit 14060009, on Seeley Creek 5.2 mi upstream from Cottonwood Creek, and 12.6 mi west of Orangeville.

DRAINAGE AREA.--146 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1965 to current year.

GAGE.--Water-stage recorder in control house at downstream end of outlet tunnel. Datum of gage is sea level (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill rock-faced dam. Storage began Nov. 3, 1965. Usable capacity, 54,610 acre-ft between elevations 6,910.0 and 6,989.7 ft above mean sea level. Dead storage, 870 acre-ft between elevations 6,817.0 and 6,866.5 ft. Inactive storage, 6,980 acre-ft between elevations 6,866.5 and 6,910.0 ft. Figures given herein represent total contents. Water is used for irrigation. Huntington North Reservoir, a small off-channel reservoir near Huntington, is operated in conjunction with Joes Valley Reservoir; records not included.

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 66,030 acre-ft June 20, 21, 1983; minimum observed since reservoir was first filled, 7,710 acre-ft Oct. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 63,870 acre-ft June 28, elevation, 6,990.9 ft; minimum observed, 24,180 acre-ft, Mar. 16, elevation, 6,946.3 ft.

## MONTHEND ELEVATION, IN FEET, AND CONTENTS AT 2400, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30 . . . . .	--	*28,810	--
Oct. 31 . . . . .	--	*27,170	-1640
Nov. 30 . . . . .	6,950.5	26,900	-270
Dec. 31 . . . . .	6,949.5	26,230	-670
CAL YR 1992 . . . . .	--	--	-5820
Jan. 31 . . . . .	--	*25,200	-1030
Feb. 28 . . . . .	--	*24,560	-640
Mar. 31 . . . . .	6,947.8	25,130	+570
Apr. 30 . . . . .	6,950.1	26,630	+1500
May 31 . . . . .	--	*44,660	+18030
June 30 . . . . .	6,989.7	62,460	+17800
July 31 . . . . .	--	*57,770	-4690
Aug. 31 . . . . .	6,979.7	51,380	-6390
Sept. 30 . . . . .	--	*44,940	-6440
WTR YR 1993 . . . . .	--	--	+16130

\* No gage-height reading, contents interpolated.

## GREEN RIVER BASIN

123

## 09326500 FERRON CREEK (UPPER STATION) NEAR FERRON, UT

LOCATION.--Lat 39°06'15", long 111°12'57", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 2, T. 20 S., R. 6 E., Emery County, Hydrologic Unit 14060009, on right bank 1.8 mi upstream from Dry Wash and 4.5 mi west of Ferron.

DRAINAGE AREA.--138 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1911 to September 1923, October 1947 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for station at site 2 mi downstream published as Ferron Creek near Ferron, Apr. 1909 to Oct. 1911, not equivalent because of diversions 1.5 mi downstream from present site.

REVISED RECORDS.--WSP 1243: 1951(P). WSP 1313: 1920(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,210 ft above sea level, from topographic map. May 6, 1911 to Sept. 30, 1923, nonrecording gages in vicinity of present site at different datums. Dec. 19, 1947 to Sept. 30, 1966, at site 1.5 mi downstream at different datum.

REMARKS.--Records poor. Slight regulation by small reservoir above station (capacity not known). Small diversions above station for irrigation, including a transmountain diversion to tributary of San Pitch River (Sevier Lake basin). Greater part of flow diverted during irrigation season by Upper North and Upper South Canals, 1.5 mi below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,180 ft<sup>3</sup>/s Aug. 27, 1952, gage height, 9.71 ft, site and datum then in use, from rating table extended above 400 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 8.70 ft and 9.71 ft; site and datum then in use; no flow Oct. 19-21, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 28	0001	*754	*5.99	No other peak greater than base discharge.			

Minimum daily discharge, 5.3 ft<sup>3</sup>/s Feb. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	e11	e6.7	e6.6	e6.2	e6.4	e22	e96	469	184	50	25
2	10	e15	e6.9	e6.4	e5.6	e7.4	e22	e130	451	177	49	25
3	10	e11	e6.6	e6.2	e5.4	e8.4	e18	e170	410	168	48	33
4	10	e9.7	e6.8	e6.0	e5.6	e9.3	e19	e160	350	161	48	33
5	10	e12	e7.0	e6.2	e5.9	e10	21	e103	331	153	52	33
6	10	e10	e6.8	e6.4	e6.1	e9.6	e19	e97	308	148	47	34
7	e9.8	e10	e7.0	e6.6	e6.3	e11	e18	108	277	145	45	32
8	e10	e10	e6.8	e6.8	e6.4	e13	e20	e95	260	143	47	31
9	e10	e8.8	e6.8	e6.8	e5.8	e15	e22	e86	247	137	45	36
10	10	e7.7	e6.9	e6.5	e5.8	e15	e21	e115	260	134	56	36
11	10	e8.3	e7.2	e6.4	e6.0	e18	23	153	285	131	57	35
12	10	e9.4	e7.0	e6.2	e5.8	e17	e25	198	325	126	43	34
13	10	e9.8	e6.8	e6.0	e5.6	e19	e20	244	333	121	38	34
14	9.8	e10	e6.6	e5.8	e5.5	e16	e20	276	349	115	35	34
15	9.6	e10	e6.8	e5.7	e5.3	e18	e22	324	367	109	34	34
16	9.4	e10	e6.5	e5.8	e5.6	e18	e27	383	362	104	31	34
17	9.4	e10	e6.4	e6.2	e5.8	e20	e36	400	356	100	30	35
18	9.4	e8.0	e6.2	e6.0	e5.8	e25	39	418	320	96	29	36
19	9.6	e7.8	e5.9	e5.8	e5.8	e20	e29	431	311	94	30	35
20	9.6	e8.0	e5.7	e5.5	e5.8	e21	e32	476	304	91	30	33
21	9.8	e7.6	e5.8	e5.7	e6.4	e21	e48	499	299	88	34	32
22	11	e7.2	e6.0	e5.9	e6.2	e22	e65	515	289	85	29	31
23	11	e6.7	e6.2	e6.3	e6.2	e23	e60	505	276	83	28	30
24	10	e6.4	e6.5	e6.4	e6.2	e23	e54	563	249	91	27	30
25	16	e6.1	e6.4	e6.6	e6.5	e24	e55	602	233	82	27	29
26	13	e6.4	e6.2	e6.8	e6.5	25	e70	592	226	79	31	28
27	11	e6.6	e6.4	e7.1	e6.5	e29	e91	622	218	76	28	28
28	11	e6.8	e6.5	e6.6	e6.3	e27	e120	623	212	74	27	25
29	12	e7.0	e6.4	e6.2	---	e26	e110	534	203	70	25	23
30	11	e6.8	e6.5	e5.8	---	e22	e99	524	192	57	26	22
31	12	---	e6.4	e6.3	---	e20	---	500	---	53	26	---
TOTAL	324.4	264.1	202.7	193.6	166.9	559.1	1247	10542	9072	3475	1152	940
MEAN	10.5	8.80	6.54	6.25	5.96	18.0	41.6	340	302	112	37.2	31.3
MAX	16	15	7.2	7.1	6.5	29	120	623	469	184	57	36
MIN	9.4	6.1	5.7	5.5	5.3	6.4	18	86	192	53	25	22
AC-FT	643	524	402	384	331	1110	2470	20910	17990	6890	2280	1860

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912-23, 1948-93, BY WATER YEAR (WY)

	18.0	13.6	10.6	8.78	9.77	13.7	45.2	220	295	101	42.5	24.2
MEAN	18.0	13.6	10.6	8.78	9.77	13.7	45.2	220	295	101	42.5	24.2
MAX	70.2	32.2	21.5	13.7	20.0	26.4	128	486	732	404	128	51.0
(WY)	1917	1985	1985	1921	1922	1986	1985	1952	1984	1983	1983	1952
MIN	7.59	6.53	4.27	3.00	4.61	5.02	13.7	44.8	40.3	17.2	12.0	10.3
(WY)	1960	1956	1963	1963	1978	1977	1967	1977	1977	1977	1977	1966

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1912-23, 1948-93

ANNUAL TOTAL	13216.2	28138.8	67.0
ANNUAL MEAN	36.1	77.1	140
HIGHEST ANNUAL MEAN			17.6
LOWEST ANNUAL MEAN			1240
HIGHEST DAILY MEAN	228	May 8	623
LOWEST DAILY MEAN	5.7	Dec 20	5.3
ANNUAL SEVEN-DAY MINIMUM	6.0	Dec 17	5.6
ANNUAL RUNOFF (AC-FT)	26210		55810
10 PERCENT EXCEEDS	121		276
50 PERCENT EXCEEDS	12		22
90 PERCENT EXCEEDS	7.0		6.2
			8.0

e Estimated

09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT

LOCATION.--Lat 38°51'30", long 110°22'10", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 34, T. 22 S., R. 14 E., Emery County, Hydrologic Unit 14060009, on left bank 300 ft upstream from bridge on State Highway 24, 14.0 mi southwest of Green River, and 34.3 mi upstream from mouth.

DRAINAGE AREA.--1,628 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1909 to September 1918, September 1919 to July 1920 (gage heights only), October 1945 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,190 ft above sea level, from topographic map. May 5, 1909 to Sept. 10, 1918, staff gage, and Sept. 10, 1919 to July 10, 1920, tape-weight gage. Nov. 29, 1945 to July 7, 1976, water-stage recorder at various sites and datums about 1 mi upstream.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 42,000 acres. Several small transmountain diversions from tributaries for irrigation in Sevier Lake basin, and some storage since Nov. 3, 1965, in Joes Valley Reservoir (see station 09323900).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft<sup>3</sup>/s Sept. 2, 1909, gage height, 12.7 ft, site and datum then in use, from rating curve extended above 3,100 ft<sup>3</sup>/s; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 29	0514	*850	*7.31				

No flow, Oct. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	31	e28	e21	45	51	62	65	523	85	13	24
2	3.2	46	e28	e23	47	70	49	73	501	80	13	24
3	2.3	33	e29	e20	44	89	43	73	495	77	13	22
4	1.5	89	e30	e18	e41	80	40	71	479	69	13	21
5	1.3	49	e30	e18	e38	72	38	71	412	71	21	20
6	e1.0	38	e29	e21	38	76	100	72	352	73	22	19
7	e.65	33	e29	e24	39	110	151	79	294	70	18	23
8	e.10	32	e28	e28	47	154	58	76	243	58	25	25
9	e.00	31	e28	e35	60	186	44	82	203	49	17	25
10	1.8	31	e28	e38	44	218	37	68	174	41	15	22
11	3.3	30	e29	e35	43	272	34	59	155	36	23	20
12	3.3	29	e29	e32	53	346	33	52	160	33	19	18
13	4.3	28	e28	e35	52	199	32	44	181	31	44	16
14	6.1	30	e25	e39	47	125	33	36	246	28	29	14
15	6.8	29	e25	e43	42	111	35	30	285	25	23	15
16	6.6	28	e23	e45	42	174	33	35	306	22	17	19
17	6.3	27	e22	e47	43	201	31	96	318	20	13	28
18	8.0	27	e21	e47	47	155	30	271	353	18	9.8	29
19	10	27	e20	e44	51	123	31	222	347	17	9.8	26
20	11	29	e19	e42	50	95	33	169	293	15	11	23
21	14	30	e18	e43	51	63	33	167	264	17	12	27
22	14	30	e19	e44	60	53	31	173	269	16	20	31
23	13	30	e20	e46	53	47	30	202	260	15	25	31
24	13	29	e21	e48	52	44	31	171	232	17	22	30
25	13	30	e21	e48	54	41	35	150	194	23	19	25
26	47	e29	e18	e46	52	38	36	134	178	30	21	23
27	71	e28	e19	e43	47	40	34	111	186	27	20	27
28	29	e29	e21	e41	50	103	34	136	218	23	23	27
29	39	e28	e23	e40	---	256	40	540	183	20	21	27
30	53	e27	e21	39	---	293	45	185	124	17	20	27
31	44	---	e20	43	---	101	---	288	---	16	21	---
TOTAL	430.45	987	749	1136	1332	3986	1296	4001	8428	1139	592.6	708
MEAN	13.9	32.9	24.2	36.6	47.6	129	43.2	129	281	36.7	19.1	23.6
MAX	71	89	30	48	60	346	151	540	523	85	44	31
MIN	.00	27	18	18	38	38	30	30	124	15	9.8	14
AC-FT	854	1960	1490	2250	2640	7910	2570	7940	16720	2260	1180	1400

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910-18, 1946-93, BY WATER YEAR (WY)

MEAN	93.0	67.7	47.3	44.3	73.1	108	112	321	579	152	91.0	73.9
MAX	848	358	125	224	200	729	748	1626	2772	965	344	309
(WY)	1917	1958	1910	1911	1910	1910	1910	1914	1983	1983	1916	1961
MIN	.85	5.68	11.8	13.1	20.9	23.3	6.84	3.72	1.09	.31	.38	.11
(WY)	1957	1978	1978	1991	1977	1976	1977	1977	1977	1961	1960	1956

## SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

## WATER YEARS 1910-18, 1946-93

[illegible]

e Estimated

## GREEN RIVER BASIN

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09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1946 to September 1949, October 1950 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July to September 1949, November 1950 to September 1962, October 1964 to September 1979, daily, October 1979 to September 1980, March 1982 to current year.

WATER TEMPERATURES: July to September 1949, October 1950 to September 1962, October 1964 to September 1978.

SUSPENDED-SEDIMENT DISCHARGE: March 1948 to September 1949, October 1950 to September 1959.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily (water years 1949, 1951-70, 1974-76), 7,230 microsiemens July 15, 1954, and June 29, 1977; minimum daily (water years 1949, 1951-76), 689 microsiemens June 29, 1957.

WATER TEMPERATURES: Maximum (water years 1949, 1951-61, 1966-76), 35.0°C July 11, 1954; minimum, 0.0°C on many days during winter period each year.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum observed, 4,030 microsiemens Apr. 3; minimum observed, 1,130 microsiemens June 2.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV, 1992											
16...	1200	28	3300	8.3	12.5	4.0	11.2	656	1200	250	140
FEB, 1993											
25...	1130	50	1530	8.3	6.0	4.5	10.8	657	870	190	97
MAR											
26...	1015	36	4010	8.2	16.0	10.0	10.0	650	1300	260	170
APR											
27...	1000	33	3990	8.3	19.0	14.0	8.6	656	1400	250	180
MAY											
21...	1135	173	1750	8.3	27.5	19.5	7.5	650	600	130	67
JUN											
23...	1230	263	1180	8.2	33.5	21.5	7.0	651	460	94	54
JUL											
23...	0930	15	2900	8.2	25.0	23.0	6.9	651	1000	200	130
AUG											
25...	1000	18	2910	8.2	25.0	21.0	7.1	652	520	200	4.0

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
NOV, 1992											
16...	350	39	4	9.9	0	369	302	1500	70	0.30	9.2
FEB, 1993											
25...	290	42	4	6.0	0	314	257	1100	68	0.20	7.0
MAR											
26...	500	44	6	10	0	338	276	2100	88	0.30	9.2
APR											
27...	510	45	6	9.7	0	305	250	2100	89	0.40	5.7
MAY											
21...	170	38	3	6.6	0	276	226	710	30	0.30	5.9
JUN											
23...	96	31	2	3.6	0	283	232	410	15	0.30	6.5
JUL											
23...	320	40	4	9.8	0	295	242	1400	64	0.40	8.4
AUG											
25...	330	58	6	9.7	0	264	216	1400	70	0.40	5.4

## GREEN RIVER BASIN

09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
NOV , 1992										
16...	2780	2510	3.78	207	0.190	0.180	0.020	0.020	0.210	0.200
FEB , 1993										
25...	1860	1920	2.53	252	0.660	0.660	--	0.030	--	0.690
MAR										
26...	3560	3310	4.84	344	0.370	0.370	--	0.020	--	0.390
APR										
27...	3540	3300	4.81	314	--	--	--	<0.010	--	<0.050
MAY										
21...	1300	1260	1.77	607	0.170	--	--	<0.010	--	0.170
JUN										
23...	858	819	1.17	609	0.120	--	--	<0.010	--	0.120
JUL										
23...	2530	2280	3.44	101	--	--	--	<0.010	--	<0.050
AUG										
25...	2410	2150	3.28	120	--	--	--	<0.010	--	<0.050

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV , 1992										
16...	0.050	0.040	0.05	0.45	0.50	0.71	3.1	0.230	0.020	<0.010
FEB , 1993										
25...	--	0.200	0.26	1.1	1.3	2.0	--	0.680	--	<0.010
MAR										
26...	--	0.070	0.09	0.63	0.70	1.1	--	0.230	--	<0.010
APR										
27...	--	0.020	0.03	0.28	0.30	0.30	--	<0.010	--	<0.010
MAY										
21...	--	0.010	0.01	1.3	1.3	1.5	--	0.810	--	<0.010
JUN										
23...	--	0.020	0.03	0.18	0.20	0.32	--	<0.010	--	<0.010
JUL										
23...	--	0.040	0.05	0.36	0.40	0.40	--	<0.010	--	<0.010
AUG										
25...	--	0.030	0.04	0.27	0.30	0.30	--	0.010	--	<0.010

DATE	TIME	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C)
NOV , 1992			
16...	1200	16	--
APR , 1993			
27...	1000	5.9	0.9
JUN			
23...	1230	4.8	4.3
JUL			
23...	0930	5.6	0.4

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
NOV , 1992		
16...	1200	330
FEB , 1993		
25...	1130	230
MAR		
26...	1015	340
APR		
27...	1000	410
MAY		
21...	1135	190
JUN		
23...	1230	120
JUL		
23...	0930	370
AUG		
25...	1000	320

## GREEN RIVER BASIN

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09328500 SAN RAFAEL RIVER NEAR GREEN RIVER, UT--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
JUN , 1993 23...	1230	4700	3	<10	<1	5	8	8200

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
JUN 23...	9	90	300	2	10	1	50

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	1200	---	---	---
2	---	---	---	---	---	---	---	---	1130	---	---	---
3	---	---	---	---	---	---	4030	---	---	---	---	---
4	---	---	---	---	---	---	---	2500	---	2300	---	---
5	---	---	---	---	---	---	---	2460	---	---	---	---
6	3480	---	---	---	---	---	4020	2500	---	2300	---	---
7	---	2610	---	---	---	---	4000	---	1400	---	---	---
8	---	---	---	---	---	---	---	---	1380	---	---	---
9	---	---	---	---	---	---	3970	---	---	---	---	---
10	---	---	---	2230	---	3200	---	1380	---	---	---	2800
11	3390	---	---	---	---	---	---	1410	---	---	---	---
12	---	3220	---	---	2520	---	---	1260	---	---	---	---
13	---	---	---	---	---	---	---	1310	---	---	---	---
14	---	---	---	---	---	---	---	1510	---	---	---	3080
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	3820	2300	---	---	---	---	---
17	---	---	---	---	2120	---	---	1470	---	---	---	---
18	3150	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	1870	---	---	---	---
20	---	---	---	2240	---	---	2240	---	---	---	---	---
21	---	3470	---	---	---	3470	---	---	---	---	---	2870
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	3050	---	---	---	---
24	---	---	---	---	---	---	---	1910	---	---	---	2960
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	2490	---	---	---	---	---
27	---	3140	---	---	---	---	---	3050	---	---	---	---
28	---	---	---	---	3150	---	---	2300	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	3100
30	---	3400	---	2400	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	3340	3170	---	2290	2600	3500	3290	2000	1280	2300	---	2960



## DIRTY DEVIL RIVER BASIN

09329050 SEVEN MILE CREEK NEAR FISH LAKE, UT

LOCATION.--Lat 38°37'40", long 111°38'50", in SE<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 13, T. 25 S., R. 2 E., Sevier County, Hydrologic Unit 14070003, on left bank 0.4 mi upstream from bridge on State Highway 25, about 0.7 mi upstream from Johnson Valley Reservoir, and 3.5 mi northeast of north end of Fish Lake.

DRAINAGE AREA.--24.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,200 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 369 ft<sup>3</sup>/s June 1, 1984, gage height, 4.03 ft; minimum, 1.9 ft<sup>3</sup>/s Nov. 16, 17, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 26	2158	*269	*3.25	No other peak greater than base discharge.			

Minimum daily, 4.0 ft<sup>3</sup>/s Dec. 20.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	8.4	e6.3	e6.5	e6.9	e7.0	e6.5	10	46	12	9.3	9.0
2	5.5	5.4	e6.5	e6.2	e6.7	e6.8	e6.6	11	43	12	9.2	8.7
3	5.4	e5.3	e6.5	e5.6	e6.4	e6.6	e6.6	14	45	12	9.1	8.6
4	5.3	e5.2	e6.4	e5.4	e6.4	e6.4	e6.4	14	37	12	10	9.1
5	5.5	e5.5	e6.3	e5.4	e6.3	e6.3	e6.6	11	33	12	11	9.5
6	5.4	e6.0	e6.4	e5.7	e6.5	e6.3	e6.6	10	33	11	9.6	9.4
7	5.3	e6.6	e6.3	e5.9	e6.6	e6.4	e6.5	9.4	31	11	9.7	8.6
8	6.0	7.1	e6.2	e6.2	e6.6	e6.5	e6.4	9.1	34	11	9.8	8.6
9	5.7	6.7	e6.4	e6.4	e6.5	e6.6	e6.4	9.2	26	11	10	8.5
10	5.5	6.5	e6.7	e6.6	e6.6	e6.7	e6.6	9.0	24	11	9.2	8.9
11	5.3	6.6	e6.7	e6.1	e6.4	e6.7	e6.4	12	24	10	9.5	9.0
12	5.4	6.8	e6.5	e5.8	e6.2	e6.6	e6.3	17	23	10	9.2	8.3
13	5.5	6.7	e6.1	e6.2	e6.2	e6.4	e6.2	22	23	10	9.1	8.3
14	5.5	6.8	e5.6	e6.4	e6.0	e6.6	e6.0	31	23	10	9.0	8.6
15	6.0	7.0	e6.3	e6.4	e6.0	e6.7	e6.0	64	22	10	8.7	8.5
16	5.6	6.7	e5.8	e6.8	e6.4	e6.9	e6.2	79	22	9.8	8.8	8.5
17	5.6	6.6	e5.4	e6.8	e6.7	e6.7	e6.1	135	26	10	8.9	8.5
18	5.6	6.6	e5.1	e6.7	e6.9	e6.4	e6.0	153	35	9.8	9.0	10
19	5.6	6.6	e4.7	e6.6	e6.8	e6.4	e6.2	139	23	10	9.0	10
20	5.5	5.7	e4.0	e6.6	e6.6	e6.7	e6.4	156	21	9.7	9.6	9.3
21	5.7	6.3	e4.3	e6.5	e6.5	e6.7	e6.5	154	20	9.6	9.4	8.8
22	5.7	e6.0	e4.8	e6.5	e6.4	e6.4	e6.3	132	18	9.9	9.0	8.5
23	5.9	e5.8	e5.3	e6.5	e6.4	e6.2	e6.1	138	17	10	9.0	8.3
24	5.9	e5.4	e5.7	e6.4	e6.6	e6.7	6.0	133	16	12	9.2	8.2
25	7.9	e5.1	e5.5	e6.4	e6.6	e6.7	6.9	145	16	10	9.0	8.6
26	6.2	e5.5	e5.4	e6.4	e6.8	e6.5	7.6	159	15	9.9	9.4	8.3
27	5.9	e5.8	e5.8	e6.6	e6.9	e6.3	9.0	128	14	9.8	9.6	8.2
28	5.9	e6.2	e6.3	e6.8	e7.0	e6.2	14	100	13	9.5	9.5	8.3
29	6.0	e6.4	e6.3	e6.8	---	e6.4	12	75	13	9.4	8.8	8.2
30	6.4	e6.3	e6.0	e6.9	---	e6.2	11	68	13	9.6	8.8	8.1
31	6.2	---	e6.0	e7.0	---	e6.2	---	55	---	9.5	9.0	---
TOTAL	178.4	187.6	181.6	197.1	182.9	202.2	212.4	2201.7	749	323.5	288.4	261.4
MEAN	5.75	6.25	5.86	6.36	6.53	6.52	7.08	71.0	25.0	10.4	9.30	8.71
MAX	7.9	8.4	6.7	7.0	7.0	7.0	14	159	46	12	11	10
MIN	5.3	5.1	4.0	5.4	6.0	6.2	6.0	9.0	13	9.4	8.7	8.1
AC-FT	354	372	360	391	363	401	421	4370	1490	642	572	518

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1993, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	9.40	8.36	7.45	6.76	6.44	6.85	14.2	47.7	37.2	13.6	11.0	9.81																	
MAX	15.7	12.5	13.1	11.3	9.79	10.3	32.0	118	140	38.7	28.6	19.1																	
(WY)	1985	1985	1985	1985	1985	1985	1986	1981	1984	1984	1984	1984																	
MIN	4.24	4.16	3.91	3.37	3.85	4.72	5.02	10.6	5.31	4.30	3.87	3.70																	
(WY)	1978	1978	1978	1992	1987	1978	1967	1977	1977	1977	1977	1977																	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1965 - 1993

ANNUAL TOTAL	3648.9	5166.2																											
ANNUAL MEAN	9.97	14.2																											
HIGHEST ANNUAL MEAN										14.9																			
LOWEST ANNUAL MEAN										32.6																			
HIGHEST DAILY MEAN										7.33																			
LOWEST DAILY MEAN																													
ANNUAL SEVEN-DAY MINIMUM																													
ANNUAL RUNOFF (AC-FT)																													
10 PERCENT EXCEEDS																													
50 PERCENT EXCEEDS																													
90 PERCENT EXCEEDS																													

e Estimated

## DIRTY DEVIL RIVER BASIN

129

09330000 FREMONT RIVER NEAR BICKNELL, UT

LOCATION.--Lat 38°18'25", long 111°31'03", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 7, T. 29 S., R. 4 E., Wayne County, Hydrologic Unit 14070003, on left bank 150 ft upstream of county road bridge, 2.9 mi southeast of Bicknell along Highway U-24.

DRAINAGE AREA.--751 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1909 to December 1912, published as "near Thurber", October 1937 to September 1958 (1944-46, fragmentary), October 1976 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,920 ft above sea level, from topographic map. May 1909 to December 1912, staff gage near present site at different datum. October 1937 to June 28, 1949, staff gages on two canals and river station about 0.25 mi downstream at different datums. June 28, 1949 to Apr. 29, 1958, water-stage recorders replaced staff gages on river and canal site using same datum. Apr. 29 to Sept. 30, 1958, staff gage on river at site 600 ft farther downstream from water-stage recorder at datum 1.67 ft lower. October 1, 1976 to April 2, 1990, water-stage recorders at site about 0.30 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 10,600 acres above station. Flow regulated by Fish Lake and Johnson, Forsythe, and Mill Meadow Reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft<sup>3</sup>/s Apr. 5, 1942, gage height, 5.8 ft, site and datum in use (from floodmarks), from rating curve extended above 700 ft<sup>3</sup>/s; minimum observed, 18 ft<sup>3</sup>/s June 2, 4, 13-15, 17, 18, 1912.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 195 ft<sup>3</sup>/s Mar. 16, gage height, 5.00 ft; minimum daily discharge, 55 ft<sup>3</sup>/s June 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	100	85	93	107	102	102	75	67	60	65	69
2	75	99	87	94	102	100	100	75	67	59	64	65
3	74	98	87	e93	e102	99	98	75	66	59	64	64
4	72	98	87	e92	e101	99	98	68	63	60	65	65
5	73	93	e86	e92	e101	100	98	72	61	61	65	66
6	74	79	e85	93	101	102	97	70	60	61	63	68
7	76	81	83	95	100	105	93	74	60	61	63	68
8	74	81	85	97	100	109	94	73	59	60	66	67
9	75	81	88	96	101	113	93	68	57	62	69	67
10	76	82	89	100	100	121	92	66	57	62	95	68
11	78	e78	91	e98	100	133	91	69	57	63	78	69
12	78	81	90	e96	100	129	90	66	56	70	70	68
13	78	83	87	95	100	121	91	67	55	71	68	67
14	76	84	e86	94	99	135	91	70	57	70	66	67
15	77	85	e85	95	103	155	92	68	58	69	65	70
16	80	86	e84	98	103	167	92	71	56	69	63	69
17	80	87	84	100	100	167	82	83	60	69	62	68
18	81	89	e85	101	99	168	81	77	65	70	62	73
19	82	90	e84	100	103	141	82	77	60	70	66	72
20	81	87	e84	98	106	125	90	78	60	69	71	68
21	83	83	e83	100	e103	122	91	80	60	70	69	66
22	84	89	83	104	105	117	88	85	58	68	65	67
23	82	88	84	e102	102	114	78	95	57	68	66	67
24	85	89	87	100	102	111	75	83	57	70	66	65
25	94	e85	89	100	101	111	77	79	59	69	66	66
26	91	78	e89	102	100	110	80	72	59	67	71	67
27	90	79	e89	102	101	128	79	69	57	66	70	70
28	91	84	89	101	103	130	74	71	59	66	70	71
29	91	84	91	102	---	127	74	71	61	68	70	70
30	93	86	91	108	---	115	74	67	59	65	67	69
31	101	---	94	108	---	105	---	70	---	64	69	---
TOTAL	2520	2587	2691	3049	2845	3781	2637	2280	1787	2033	2097	2036
MEAN	81.3	86.2	86.8	98.4	102	122	87.9	73.5	59.6	65.6	67.6	67.9
MAX	101	100	94	108	107	168	102	95	67	71	95	73
MIN	72	78	83	92	99	74	74	66	55	59	62	64
AC-FT	5000	5130	5340	6050	5640	7500	5230	4520	3540	4030	4160	4040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1993, BY WATER YEAR (WY)

	MEAN	86.7	90.9	86.8	88.9	97.8	108	133	92.9	78.4	72.8	78.8	76.8
MAX	145	140	133	131	135	166	412	163	174	135	139	119	
(WY)	1985	1985	1985	1985	1984	1985	1987	1985	1984	1984	1984	1984	1984
MIN	54.1	59.7	63.7	66.1	70.0	66.4	63.3	58.7	46.1	50.7	46.3	51.4	
(WY)	1980	1980	1979	1980	1980	1980	1980	1981	1980	1980	1980	1980	1978

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1977 - 1993
ANNUAL TOTAL	31624	30343	
ANNUAL MEAN	86.4	83.1	90.9
HIGHEST ANNUAL MEAN			138
LOWEST ANNUAL MEAN			60.2
HIGHEST DAILY MEAN	133	168	813
LOWEST DAILY MEAN	69	55	34
ANNUAL SEVEN-DAY MINIMUM	71	57	38
ANNUAL RUNOFF (AC-FT)	62730	60190	65840
10 PERCENT EXCEEDS	102	102	127
50 PERCENT EXCEEDS	85	81	83
90 PERCENT EXCEEDS	74	62	57

e Estimated

## DIRTY DEVIL RIVER BASIN

09330230 FREMONT RIVER NEAR CAINEVILLE, UT

LOCATION.--Lat 38°16'40", long 111°04'00", in NE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, sec. 20, T. 29 S., R. 8 E., Wayne County, Hydrologic Unit 14070003, on right bank 2.0 mi downstream from Pleasant Creek, 4.5 mi southwest of Caineville, and 9.8 mi east of Fruita, Utah.

DRAINAGE AREA.--1,208 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1967 to current year.

GAGE.--Water-stage recorder and bubble gage. Elevation of gage is 4,750 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft<sup>3</sup>/s July 24, 1984, gage height, 10.20 ft, from rating curve extended above 4,000 ft<sup>3</sup>/s on basis of slope-conveyance study; minimum discharge, 10 ft<sup>3</sup>/s June 9, 1981, July 31, Aug. 1, 1986, June 28, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 16	2134	*396	*2.83				

Minimum daily discharge, 21 ft<sup>3</sup>/s July 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e35	e88	95	e96	e97	102	101	60	e56	e23	32	55
2	e38	e84	94	e95	e94	101	98	60	e54	e23	32	47
3	e40	e82	94	e95	e91	99	93	61	e50	e22	30	45
4	e41	79	89	e94	99	99	93	56	e48	e22	32	44
5	e43	80	87	e96	96	98	94	55	e46	e22	33	e45
6	46	80	90	e98	102	102	94	57	e44	e23	33	e46
7	44	79	95	e99	102	106	90	58	e42	22	37	e47
8	e45	83	93	e100	104	107	89	60	e41	23	43	e48
9	e46	80	100	e101	109	115	89	59	e40	24	49	e48
10	e46	78	94	e102	104	121	88	55	e38	29	89	e47
11	e47	75	93	e100	102	135	87	48	e35	30	58	e49
12	e47	77	94	e99	99	138	85	48	e34	26	44	e52
13	e48	78	92	e98	100	118	85	49	e33	22	39	e50
14	e47	81	92	e96	99	125	86	49	e32	21	39	e52
15	e46	82	97	e93	99	134	83	52	e31	21	39	e54
16	e48	82	88	e95	103	154	86	80	e31	25	36	e56
17	e50	82	e89	e96	102	161	82	80	e31	26	32	e54
18	e52	84	e89	e98	98	164	77	61	e32	25	30	e58
19	e55	85	e87	e97	103	149	77	53	e37	23	30	e62
20	e58	83	e86	e97	117	129	75	e56	e35	27	39	e57
21	e62	79	e87	e97	103	121	78	e60	e32	26	45	e56
22	e64	82	e88	e98	102	118	76	e62	e30	24	40	e54
23	e68	85	e89	e96	102	114	74	e68	e28	28	37	e56
24	e72	82	e92	e94	104	112	66	e70	e26	30	35	e58
25	e74	84	e92	e94	102	111	69	63	e25	32	43	e57
26	77	84	e93	e96	99	110	70	e58	e25	31	43	e58
27	67	85	e94	e97	100	122	70	e56	e25	27	47	e60
28	70	90	e95	e95	104	124	67	e56	e24	27	50	e62
29	75	88	e96	e96	---	123	55	e56	e23	28	48	e64
30	84	90	e95	e98	---	116	58	e52	e25	29	40	e64
31	e85	---	e96	e100	---	106	---	e52	---	32	64	---
TOTAL	1720	2471	2855	3006	2836	3734	2435	1810	1053	793	1288	1605
MEAN	55.5	82.4	92.1	97.0	101	120	81.2	58.4	35.1	25.6	41.5	53.5
MAX	85	90	100	102	117	164	101	80	56	32	89	64
MIN	35	75	86	93	91	98	55	48	23	21	30	44
AC-FT	3410	4900	5660	5960	5630	7410	4830	3590	2090	1570	2550	3180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1993, BY WATER YEAR (WY)

MEAN	66.9	86.6	88.6	91.6	98.6	103	100	66.9	45.6	49.6	60.7	57.9
MAX	122	133	134	136	143	170	334	213	155	171	162	111
(WY)	1985	1985	1986	1985	1985	1985	1987	1973	1983	1985	1971	1984
MIN	38.0	58.6	66.7	60.2	82.5	79.3	52.5	26.6	21.3	25.3	24.0	23.8
(WY)	1980	1982	1969	1975	1979	1981	1976	1974	1981	1980	1978	1978

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1968 - 1993

ANNUAL TOTAL	24433	25606	76.2	1985
ANNUAL MEAN	66.8	70.2	133	1978
HIGHEST ANNUAL MEAN			56.6	1985
LOWEST ANNUAL MEAN			1200	1980
HIGHEST DAILY MEAN	200	Jul 24	164	Mar 18
LOWEST DAILY MEAN	24	Jun 30	21	Jul 14
ANNUAL SEVEN-DAY MINIMUM	29	Sep 9	22	Jul 1
ANNUAL RUNOFF (AC-FT)	48460	50790	55220	
10 PERCENT EXCEEDS	98	102	115	
50 PERCENT EXCEEDS	70	72	74	
90 PERCENT EXCEEDS	32	30	30	

e Estimated

LOCATION.--Lat 38°58'55", long 111°14'55", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 21, T. 21 S., R. 6 E., Emery County, Hydrologic Unit 14070002, on left bank 100 ft upstream from Emery Canal and 4.1 mi north of Emery.

PERIOD OF RECORD.--April to July 1909, July 1910 to July 1914, June 1949 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above sea level, from topographic map. Apr. 29 to July 31, 1909, reference point. July 23, 1910 to July 16, 1914, staff gages, at sites about 1 mi upstream at different datums. June 29, 1949 to May 1, 1957, water-stage recorder at site 100 ft upstream at datum 2.89 ft higher prior to Mar. 20, 1953, and at datum 1.89 ft higher thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,340 ft<sup>3</sup>/s May 10, 1952, gage height, 11.14 ft, present datum from rating curve extended above 400 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; no flow Apr. 13-16, 1911.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
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Minimum daily discharge, 6.9 ft<sup>3</sup>/s Feb. 15.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.1	e8.6	e8.7	8.2	8.9	18	64	215	107	44	37
2	11	13	e8.9	e8.4	7.0	e9.5	18	76	212	103	45	36
3	12	8.6	e8.7	e8.0	7.2	e10	16	93	198	100	64	46
4	12	7.7	e8.7	e7.9	e7.1	e11	18	88	179	98	46	45
5	13	13	e9.0	e8.2	e7.3	e12	19	55	170	96	49	45
6	13	11	e8.9	e8.6	e7.6	e11	17	53	163	90	46	45
7	13	11	e9.0	e9.1	e7.8	e12	15	59	156	87	47	43
8	13	11	e8.9	e9.5	7.9	e13	17	49	149	84	47	42
9	13	10	e8.9	e9.6	7.3	e14	20	41	140	80	47	41
10	13	7.8	e9.1	e9.3	7.5	14	19	55	135	78	48	44
11	12	8.7	e9.3	e9.0	7.3	15	22	85	134	76	46	39
12	13	e10	e9.1	8.7	7.2	14	24	109	136	78	44	34
13	13	e11	e8.8	e8.5	e7.1	14	17	130	140	74	42	34
14	13	e12	8.6	e8.3	e7.0	12	17	153	142	69	41	34
15	13	e12	e8.9	e8.1	e6.9	14	19	163	148	65	39	33
16	13	12	e8.8	e8.4	e7.3	14	22	183	153	62	38	33
17	13	12	e8.5	e8.8	e7.6	15	30	198	161	61	37	33
18	12	11	e8.1	e8.5	e7.8	18	32	209	156	58	37	35
19	13	9.4	e7.8	e8.0	e8.1	16	24	221	149	57	44	33
20	12	9.6	e7.5	7.5	8.3	16	27	245	145	56	44	32
21	9.9	e9.2	e7.8	e7.7	8.6	16	40	245	141	55	43	31
22	10	e8.8	e8.2	e7.9	8.6	17	56	239	138	54	41	31
23	10	e8.4	e8.6	e8.4	e8.6	19	53	249	137	53	40	31
24	11	e8.6	e8.8	e8.7	8.6	21	44	274	132	56	39	31
25	22	e7.7	e8.6	e9.1	9.0	21	44	248	130	52	41	30
26	11	e8.1	e8.3	e9.4	e8.9	22	58	245	126	50	42	30
27	10	e8.5	e8.3	9.8	8.9	21	73	250	121	49	40	29
28	10	e8.7	e8.6	8.9	8.5	18	79	246	117	48	39	29
29	10	e8.8	e8.5	8.3	---	17	74	233	113	47	38	28
30	11	e8.6	e8.6	7.8	---	17	68	225	110	47	38	27
31	11	---	e8.4	8.5	---	16	---	224	---	45	38	---
TOTAL	376.9	295.3	266.8	265.6	219.2	468.4	1000	5007	4446	2135	1334	1061
MEAN	12.2	9.84	8.61	8.57	7.83	15.1	33.3	162	148	68.9	43.0	35.4
MAX	22	13	9.3	9.8	9.0	22	79	274	215	107	64	46
MIN	9.9	7.7	7.5	7.5	6.9	8.9	15	41	110	45	37	27
AC-FT	748	586	529	527	435	929	1980	9930	8820	4230	2650	2100

MEAN	18.1	11.8	9.24	7.98	8.54	12.4	33.4	102	124	69.5	40.4	25.8
MAX	60.9	34.8	22.6	14.6	16.1	37.7	112	306	330	239	104	59.7
(WY)	1985	1985	1985	1985	1958	1911	1985	1952	1983	1983	1983	1983
MIN	4.78	3.73	2.00	2.00	3.09	5.72	7.84	14.2	15.7	17.1	7.55	9.58
(WY)	1978	1912	1912	1911	1911	1977	1967	1977	1977	1977	1977	1977

ANNUAL TOTAL	8735.4		16875.2						
ANNUAL MEAN	23.9		46.2			38.7			
HIGHEST ANNUAL MEAN						86.1			1983
LOWEST ANNUAL MEAN						9.40			1977
HIGHEST DAILY MEAN	112	May 27	274	May 24	515				1952
LOWEST DAILY MEAN	5.4	Jan 3	6.9	Feb 15		.00			1911
ANNUAL SEVEN-DAY MINIMUM	5.8	Jan 1	7.2	Feb 9		1.0			1911
ANNUAL RUNOFF (AC-FT)	17330		33470		28020				
10 PERCENT EXCEEDS	61		139		99				
50 PERCENT EXCEEDS	13		18		17				
90 PERCENT EXCEEDS	7.0		8.2		7.0				

e Estimated

LOCATION.--Lat 38°05'39", long 110°24'24", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 20, T. 31 S., R. 14 E., Garfield County, Hydrologic Unit 14070004, on right bank 0.25 mi upstream from Poison Spring Wash and 25.5 mi south-east of Hanksville.

REVISED RECORDS.--WDR UT-77-1: Drainage area. WDR UT-80-1: 1979, 1977-79 (P).

REMARKS.--Records poor. Many diversions for irrigation above station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft<sup>3</sup>/s, and maximum (\*):

No flow many days June-August.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e25	e118	e102	e102	e135	e124	e120	87	155	.00	.00	e70
2	e26	e120	e104	e101	e132	e122	e110	71	146	.00	.00	e50
3	e26	e118	e100	e100	e130	e121	e105	82	130	.00	.00	e49
4	e27	e108	e96	e100	120	e121	e104	e100	e130	.00	.00	e46
5	e27	e110	e92	e102	113	e129	e103	e99	104	.00	.00	e50
6	34	e108	e91	e104	e113	e135	e103	e140	100	.00	.00	e52
7	28	e105	e93	e105	e110	e150	e105	e160	103	.00	.00	e52
8	e29	e100	e100	e106	e113	e160	e101	e92	91	.00	.00	e52
9	e30	e103	e100	e108	e114	e175	e96	75	101	.00	e25	e53
10	e32	e102	e103	e108	e115	234	e94	72	88	.00	e70	e52
11	e35	e100	e97	e107	e110	258	e94	82	86	.00	e120	e51
12	e36	e100	e96	e104	e109	273	e94	67	48	.00	e70	e54
13	e37	e100	e93	e104	e109	295	e94	49	31	.00	e45	e56
14	e40	e95	e90	e104	e110	228	e92	50	16	.00	e35	e54
15	e38	e97	e89	e108	e110	187	e92	98	7.3	.00	e30	e57
16	e37	e100	e86	e110	e112	182	e91	e115	4.8	.00	e25	e60
17	e40	e102	e87	e110	e112	223	e91	397	3.2	.00	e23	e58
18	e42	e105	e90	e114	e112	265	e84	303	2.9	.00	e22	e60
19	e45	e107	e90	e116	e115	281	e83	286	7.7	.00	e21	e62
20	e50	e110	e90	e115	e120	280	e82	241	24	.00	e20	e64
21	e52	e104	e91	e116	e130	e210	89	260	29	.00	e30	e60
22	e54	e100	e92	e118	e125	e190	88	234	23	.00	e40	e62
23	e56	e100	e92	e120	e115	e170	91	220	8.1	.00	e32	e63
24	e60	e102	e94	e115	e116	e160	96	210	6.7	.00	e18	e62
25	e200	e100	e95	e112	e116	e150	103	207	2.7	.00	e17	e64
26	e110	e94	e98	e115	e120	e140	77	184	1.2	.00	e20	e64
27	e105	e93	e98	e120	e120	e145	80	176	.11	.00	e22	e66
28	e110	e97	e100	e118	e120	e155	81	183	.00	.00	e25	e68
29	e110	e96	e100	e124	---	e160	79	170	.00	.00	e26	e68
30	e112	e95	e100	e132	---	e150	99	167	.00	.00	e30	e70
31	e115	---	e102	e139	---	e130	---	153	---	.00	e50	---
TOTAL	1768	3089	2951	3457	3276	5703	2821	4830	1449.71	0.00	816.00	1749
MEAN	57.0	103	95.2	112	117	184	94.0	156	48.3	.0000	26.3	58.3
MAX	200	120	104	139	135	295	120	397	155	.00	120	70
MIN	25	93	86	100	109	121	77	49	.00	.00	.00	46
AC-FT	3510	6130	5850	6860	6500	11310	5600	9580	2880	.00	1620	3470

MEAN	99.1	127	96.4	97.8	136	138	107	83.9	70.5	57.6	93.9	88.4
MAX	666	1059	174	158	277	320	384	280	549	277	538	635
(WY)	1958	1958	1985	1950	1978	1949	1985	1958	1983	1950	1957	1961
MIN	25.6	52.5	22.8	33.5	43.5	68.9	15.8	1.34	.000	.000	.16	.23
(WY)	1956	1978	1979	1979	1979	1967	1967	1972	1977	1991	1960	1979

## WATER YEARS 1949 - 1993

e Estimated

ESCALANTE RIVER BASIN

133

09337000 PINE CREEK NEAR ESCALANTE, UT

LOCATION.--Lat 37°51'45", long 111°38'07", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 12, T. 34 S., R. 2 E., Garfield County, Hydrologic Unit 14070005, on right bank 0.2 mi upstream from unnamed right bank tributary and 7 mi north of Escalante.

DRAINAGE AREA.--68.1 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1950 to September 1955, July 1957 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above sea level, from topographic map.

REMARKS.--Records fair except those for flows less than 2.0 ft<sup>3</sup>/s and estimated daily discharges, which are poor. Several small storage reservoirs above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,010 ft<sup>3</sup>/s, Aug. 2, 1967, gage height, 7.72 ft, from rating curve extended above 35 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 7.52 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug. 8	1600	a *361	*4.96	Aug. 25	2200	a 113	3.46

a From rating curve extended above 47 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 4.21 ft.

Minimum daily discharge, 0.50 ft<sup>3</sup>/s for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.50	2.3	e1.0	e1.0	e.70	e1.0	6.3	17	21	12	10	8.0
2	e.50	2.4	e1.0	e1.5	e.70	e1.0	6.0	17	19	12	10	6.9
3	e.50	2.5	e1.0	e1.5	e.70	e1.0	5.9	17	17	11	10	7.5
4	e.50	2.1	e1.0	e1.0	e.60	e1.0	6.7	25	16	8.8	10	7.6
5	e.50	2.6	e1.0	e.90	e.60	e1.0	6.8	19	15	8.1	11	7.2
6	e.50	2.6	e1.0	e.90	e.60	e1.0	5.9	18	15	7.7	11	7.2
7	e.50	2.6	e1.0	e.90	e.60	e1.0	5.6	17	14	7.5	11	7.1
8	e.50	2.5	e1.0	e.90	e.70	e1.5	6.4	17	14	7.3	22	7.0
9	e.50	2.4	e1.0	e.90	e.70	e1.5	7.5	15	13	7.2	11	7.0
10	e.50	2.2	e1.0	e.80	e.70	e1.5	7.2	15	12	7.0	11	7.0
11	e.50	e2.0	e1.5	e.80	e.70	e2.0	7.6	19	12	7.4	11	7.2
12	e.50	e2.5	e1.5	e.80	e.60	e2.0	7.8	23	12	7.3	8.7	7.7
13	e.50	e2.5	e1.0	e.80	e.60	e1.5	6.9	26	11	9.7	8.5	7.4
14	e1.0	e2.5	e1.0	e1.0	e.60	e1.5	7.0	26	10	11	8.2	7.3
15	e1.5	e2.5	e1.0	e1.0	e.60	e1.5	7.2	30	10	11	7.8	7.6
16	e1.0	2.6	e1.0	e.80	e.60	e2.0	7.7	33	10	11	7.3	8.0
17	e1.0	2.6	e.90	e.70	e.60	e2.5	9.0	40	10	11	7.3	8.4
18	e1.8	2.6	e.80	e.70	e.60	e3.0	9.7	50	11	11	7.2	8.3
19	e1.8	2.6	e.60	e.80	e.80	e4.0	9.3	50	10	8.6	7.3	8.4
20	1.6	2.2	e.60	e.70	e1.0	e4.0	9.2	58	9.5	8.0	11	8.3
21	1.8	1.8	e.60	e.60	e.80	e4.0	9.9	59	9.3	7.7	11	6.7
22	2.1	e1.5	e.60	e.50	e.80	e5.0	11	56	9.1	7.6	9.2	5.8
23	1.8	e1.5	e.60	e.50	e.80	7.6	12	48	8.8	7.6	9.1	5.6
24	1.8	e1.0	e.60	e.50	e.80	7.1	12	50	8.5	8.2	7.8	5.6
25	2.7	e1.0	e.60	e.50	e.80	7.4	13	56	8.4	7.9	14	5.5
26	2.1	e1.0	e.70	e.50	e.80	7.3	13	58	8.3	7.7	12	5.5
27	1.9	e1.0	e1.0	e.50	e.80	7.1	13	53	8.1	7.6	11	5.4
28	2.0	e1.0	e1.0	e.50	e1.0	5.1	16	42	8.0	7.4	7.5	5.4
29	2.2	e1.0	e1.5	e.50	---	4.2	16	34	7.9	7.2	7.3	5.3
30	2.5	e1.0	e1.5	e.50	---	4.4	17	30	9.5	7.3	7.4	5.2
31	4.0	---	e1.5	e.60	---	5.6	---	25	---	8.6	8.1	---
TOTAL	41.10	60.6	30.10	24.10	19.90	100.3	280.6	1043	347.4	269.4	305.7	207.1
MEAN	1.33	2.02	.97	.78	.71	3.24	9.35	33.6	11.6	8.69	9.86	6.90
MAX	4.0	2.6	1.5	1.5	1.0	7.6	17	59	21	12	22	8.4
MIN	.50	1.0	.60	.50	.60	1.0	5.6	15	7.9	7.0	7.2	5.2
AC-FT	82	120	60	48	39	199	557	2070	689	534	606	411

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1993, BY WATER YEAR (WY)

MEAN	2.93	2.74	2.20	2.05	2.13	2.60	7.27	19.0	7.48	6.12	5.10	3.92
MAX	9.10	6.54	6.25	6.05	6.70	6.59	28.9	50.9	34.5	25.4	15.2	9.72
(WY)	1984	1984	1984	1974	1984	1984	1987	1958	1983	1983	1983	1983
MIN	.000	.000	.000	.045	.039	.052	.070	.21	.000	.27	.90	.29
(WY)	1965	1965	1965	1965	1965	1965	1977	1977	1977	1959	1977	1977

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1958 - 1993

ANNUAL TOTAL	1602.64	2729.30	
ANNUAL MEAN	4.38	7.48	
HIGHEST ANNUAL MEAN			5.32
LOWEST ANNUAL MEAN			12.5
HIGHEST DAILY MEAN	52	59	.62
LOWEST DAILY MEAN	.50	.50	205
ANNUAL SEVEN-DAY MINIMUM	.50	.50	.00
ANNUAL RUNOFF (AC-FT)	3180	5410	.00
10 PERCENT EXCEEDS	8.9	16	9.8
50 PERCENT EXCEEDS	2.3	5.6	3.0
90 PERCENT EXCEEDS	.80	.60	.65

e Estimated



## ESCALANTE RIVER BASIN

09337500 ESCALANTE RIVER NEAR ESCALANTE, UT

LOCATION.--Lat 37°46'41", long 111°34'26". in NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , SE $\frac{1}{4}$ , sec. 9, T. 35 S., R. 3 E., Garfield County, Hydrologic Unit 14070005, on left bank 150 ft downstream from Pine Creek and 2 mi northeast of Escalante.

DRAINAGE AREA.--320 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1909 to April 1913, October 1942 to September 1955, December 1971 to current year. Published as Escalante Creek near Escalante 1909-13.

REVISED RECORDS.--WSP 1149: 1943(M), 1944, 1945(M). WRD UT-73-1: 1972.

GAGE.--Water-stage recorder. Elevation of gage, 5,670 ft above sea level, from topographic map. Prior to Apr. 30, 1913, staff at approximately same site at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 2,300 acres of crop and pastureland.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,450 ft<sup>3</sup>/s, August 1953, day unknown, gage height, 9.9 ft from outside high-water mark, from rating curve extended above 89 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights, 4.60 ft, 5.50 ft, 7.34 ft, and 7.59 ft; minimum daily, 0.07 ft<sup>3</sup>/s, July 11, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 983 ft<sup>3</sup>/s, May 16 at 2030 hrs, gage height, 5.30 ft, from rating curve extended above 150 ft<sup>3</sup>/s as explained above and also at gage heights 5.31 ft and 6.15 ft; minimum daily discharge, 0.46 ft<sup>3</sup>/s, July 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	2.0	e2.5	2.5	1.1	1.7	e45	41	84	4.2	.72	13
2	.74	4.3	2.6	e3.0	1.4	1.8	e50	37	87	3.8	1.2	3.0
3	.59	4.3	e3.0	e3.0	1.3	1.7	e60	33	e80	3.1	1.4	2.4
4	.63	3.3	3.1	e3.0	1.1	1.6	e60	45	e74	2.3	1.7	2.2
5	.55	3.7	2.9	e3.0	e1.0	2.0	e60	32	e70	1.9	1.9	e2.0
6	.67	3.0	e3.0	2.7	1.0	2.6	e60	32	e65	1.5	1.7	e2.0
7	.48	3.9	2.7	2.4	.95	2.9	e70	33	e62	1.4	2.5	1.0
8	.48	3.7	2.6	2.3	.94	3.6	e80	30	e60	1.6	35	1.72
9	.51	3.4	2.5	2.2	1.3	7.4	e80	29	e59	1.6	21	2.8
10	.56	3.2	2.1	2.0	1.2	12	e70	29	55	1.3	68	3.0
11	.72	2.2	2.2	1.8	1.1	11	e70	35	54	.88	26	1.6
12	e1.0	2.9	2.2	e1.5	1.0	9.7	e60	38	47	.79	9.8	1.5
13	e1.0	3.7	2.2	1.7	.97	7.8	e60	43	e40	.69	7.4	1.8
14	e3.0	3.9	e2.5	2.7	.93	8.4	e60	45	e35	.72	6.5	2.0
15	2.7	3.9	2.3	2.7	e.90	14	e60	50	e33	.87	5.1	2.4
16	1.7	4.0	e2.5	1.2	.87	16	e55	159	e31	1.5	3.7	3.4
17	1.7	4.0	2.4	1.0	.84	20	e55	136	e31	1.2	3.5	3.6
18	1.7	3.9	2.1	1.4	.88	24	e55	102	e32	1.3	3.4	3.7
19	1.7	3.8	e2.0	1.2	1.8	21	e50	84	e27	1.1	4.5	3.7
20	1.3	3.6	e2.0	1.1	2.8	19	e50	97	e27	.75	9.5	3.6
21	1.2	2.3	e2.0	.94	1.6	22	e50	94	e19	.58	e14	3.4
22	1.2	3.6	e2.0	.91	1.4	32	e50	110	17	.46	e8.0	2.3
23	1.2	3.7	e2.0	.77	1.2	41	e50	115	15	.52	e7.0	2.0
24	1.3	2.3	e2.5	.80	1.1	e50	e45	126	13	1.0	e15	2.0
25	1.3	e2.5	e2.5	1.0	1.3	55	e45	109	12	1.2	e30	1.9
26	1.0	e2.5	e2.5	.83	1.2	44	e45	114	8.6	1.2	e20	2.0
27	1.1	e2.0	e2.5	.84	1.2	46	e45	117	9.7	1.1	14	2.1
28	1.1	2.0	e2.5	.99	1.5	31	e40	116	7.6	1.2	9.6	2.2
29	1.4	2.2	e2.5	.80	---	32	30	97	5.2	.98	10	2.1
30	1.4	e2.5	e2.5	.87	---	31	35	97	3.7	.91	14	2.0
31	1.5	---	e2.5	1.0	---	29	---	97	---	.76	20	---
TOTAL	36.07	96.3	75.4	52.15	33.88	601.2	1645	2322	1163.8	42.41	376.12	81.42
MEAN	1.16	3.21	2.43	1.68	1.21	19.4	54.8	74.9	38.8	1.37	12.1	2.71
MAX	3.0	4.3	3.1	3.0	2.8	55	80	159	87	4.2	68	13
MIN	.48	2.0	2.0	.77	.84	1.6	30	29	3.7	.46	72	.72
AC-FT	72	191	150	103	67	1190	3260	4610	2310	84	746	161

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1993, BY WATER YEAR (WY)

	6.52	6.40	5.42	6.25	8.22	12.4	16.0	28.9	20.1	6.36	7.64	6.40
MEAN	6.52	6.40	5.42	6.25	8.22	12.4	16.0	28.9	20.1	6.36	7.64	6.40
MAX	29.9	23.8	15.5	15.8	19.4	39.7	54.8	124	125	28.0	30.8	29.9
(WY)	1973	1988	1984	1984	1982	1989	1993	1973	1983	1983	1983	1980
MIN	.90	.80	.77	.96	1.21	.67	1.23	1.15	.48	.47	.84	1.14
(WY)	1991	1991	1991	1991	1993	1991	1990	1990	1990	1978	1978	1989

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1973 - 1993

ANNUAL TOTAL	2414.71	6525.75	10.9
ANNUAL MEAN	6.60	17.9	30.7
HIGHEST ANNUAL MEAN			1.49
LOWEST ANNUAL MEAN			270
HIGHEST DAILY MEAN	92	159	.07
LOWEST DAILY MEAN	.48	.46	.18
ANNUAL SEVEN-DAY MINIMUM	.55	.55	7890
ANNUAL RUNOFF (AC-FT)	4790	12940	24
10 PERCENT EXCEEDS	15	60	4.5
50 PERCENT EXCEEDS	2.3	2.8	1.0
90 PERCENT EXCEEDS	.88	.94	

e Estimated

## SAN JUAN RIVER BASIN

135

09378170 SOUTH CREEK ABOVE RESERVOIR NEAR MONTICELLO, UT

LOCATION.--Lat 37°50'48", long 109°22'08", in NE $\frac{1}{4}$ , SW $\frac{1}{4}$ , sec. 2, T. 34 S., R. 23 E., San Juan County,  
Hydrologic Unit 14080203, 200 ft upstream from west side of reservoir and 2 mi southwest of Monticello, Ut.

DRAINAGE AREA.--8.64 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,170 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 163 ft<sup>3</sup>/s Nov. 5, 1987, gage height, 4.17 ft; minimum,  
0.02 ft<sup>3</sup>/s July 3, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 34 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 25	1647	41	1.93	Apr. 18	1737	57	2.27
Apr. 5	1710	39	1.87	Apr. 22	1800	53	2.17
Apr. 11	1753	51	2.13	May 17	0141	*63	*2.39

Minimum daily, 0.04 ft<sup>3</sup>/s Dec. 20.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.12	e.06	e.10	e.08	.05	11	22	29	4.2	.67	.26
2	.08	.11	e.07	e.10	e.07	.06	12	19	25	3.6	.66	.26
3	.11	.11	e.07	e.09	e.07	.08	12	20	21	3.5	.61	.27
4	.14	.13	e.06	e.08	e.07	.11	16	21	18	3.3	.56	.27
5	.14	.13	e.07	e.08	e.07	.12	23	20	15	3.0	.54	.27
6	.13	.14	e.06	e.08	e.08	.18	14	17	14	2.6	.50	.27
7	.10	.11	e.07	e.10	e.08	.51	7.8	17	12	2.3	.48	.27
8	.11	.11	e.06	e.10	e.09	1.1	7.3	14	9.9	2.0	.47	.27
9	.12	.11	e.08	e.11	e.09	1.7	12	11	8.3	1.9	.43	.27
10	.14	.11	e.09	e.11	e.08	1.2	16	11	7.5	1.7	2.6	.27
11	.14	.11	e.08	e.08	e.08	.90	25	13	7.3	1.5	e.65	.27
12	.12	.16	e.08	e.06	e.07	.62	17	15	8.5	1.5	e.55	.27
13	.11	.15	e.07	e.08	e.07	.38	11	21	10	1.3	e.45	.26
14	.11	.13	e.07	e.09	e.06	.46	10	26	13	1.2	e.35	.22
15	.11	.12	e.08	e.08	e.06	.82	11	35	15	1.1	e.30	.26
16	.12	.10	e.07	e.10	e.06	1.8	15	47	15	1.0	e.26	.27
17	.16	.08	e.07	e.10	e.06	2.3	24	60	15	1.0	e.25	.27
18	.25	.05	e.06	e.10	e.07	5.5	31	50	9.3	.93	e.25	.27
19	.32	.05	e.06	e.09	e.09	5.9	18	44	7.7	.86	e.24	.27
20	.34	.06	e.04	e.08	e.08	6.2	15	48	7.1	.78	e.24	.27
21	.36	e.07	e.07	e.08	e.07	8.5	19	49	7.3	.73	.27	.27
22	.38	e.06	e.09	e.08	e.06	8.8	26	53	7.1	.68	.25	.27
23	.38	e.06	e.10	e.07	e.06	10	30	49	6.7	.63	.22	.27
24	.38	e.05	e.10	e.07	.08	14	28	44	6.2	.70	.22	.27
25	e.42	e.05	e.09	e.06	.06	19	24	46	5.4	.68	.22	.27
26	e.44	e.05	e.10	e.06	.05	19	28	51	4.8	.68	.36	.27
27	e.20	e.06	e.11	e.07	.05	12	28	55	4.5	.70	.25	.27
28	e.30	e.07	e.11	e.07	.05	6.0	26	44	4.6	.70	.22	.27
29	e.34	e.07	e.10	e.07	---	5.8	26	38	4.7	.69	.24	.31
30	e.28	e.06	e.10	e.09	---	7.1	26	33	4.6	.70	.25	.38
31	.45	---	e.10	e.09	---	7.6	---	30	---	.70	.24	---
TOTAL	6.86	2.79	2.44	2.62	1.96	147.79	569.1	1023	323.5	46.86	13.80	8.16
MEAN	.22	.093	.079	.085	.070	4.77	19.0	33.0	10.8	1.51	.45	.27
MAX	.45	.16	.11	.11	.09	.19	.31	.60	.29	4.2	2.6	.38
MIN	.08	.05	.04	.06	.05	.05	7.3	11	4.5	.63	.22	.22
AC-FT	14	5.5	4.8	5.2	3.9	293	1130	2030	642	.93	.27	.16

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1993, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	.24	.98	.23	.20	.39	2.22	7.80	8.46
MAX	.45	5.40	.64	.45	1.08	4.77	19.0	33.0
(WY)	1987	1988	1988	1988	1986	1993	1993	1993
MIN	.10	.093	.079	.075	.070	.10	.22	.21
(WY)	1992	1993	1993	1990	1993	1991	1990	1990

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1986 - 1993

ANNUAL TOTAL	393.95	2148.88	
ANNUAL MEAN	1.08	5.89	2.08
HIGHEST ANNUAL MEAN			5.89
LOWEST ANNUAL MEAN			.17
HIGHEST DAILY MEAN	12	60	60
LOWEST DAILY MEAN	.04	.04	.04
ANNUAL SEVEN-DAY MINIMUM	.06	.06	.05
ANNUAL RUNOFF (AC-FT)	781	4260	1500
10 PERCENT EXCEEDS	4.0	21	5.7
50 PERCENT EXCEEDS	.20	.27	.30
90 PERCENT EXCEEDS	.08	.07	.10

e Estimated

## SAN JUAN RIVER BASIN

09378600 MONTEZUMA CREEK NEAR BLUFF, UT

LOCATION.--Lat 37°18'30", long 109°17'35", in NW1/4SW1/4, sec. 16, T. 40 S., R. 24 E., San Juan County, Hydrologic Unit 14080201, on right bank approximately 200 ft upstream from bridge on Highway 262, 3.4 mi above mouth, and 14 mi southeast of Bluff.

DRAINAGE AREA (REVISED).--1,154 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1985 to September 1993 (discontinued). Annual maximum only December 1958 to September 1971 at crest-stage site.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,490 ft above sea level, from topographic map. December 1958 to September 1971, crest-stage gage only at various sites upstream from bridge at different datums. June 6, 1985 to September 30, 1985 instantaneous measurements only at same site.

REMARKS.--Records poor. Flow affected by storage in Lloyd's Lake at headwaters with a capacity of approximately 3,000 acre-ft and several diversions for agricultural use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft<sup>3</sup>/s (estimated) Sept. 6, 1970, gage height, unknown; 6,890 ft<sup>3</sup>/s Aug. 7, 1988, gage height, 16.08 ft; no flow on many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,970 ft<sup>3</sup>/s Feb. 20, gage height, 13.09 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.40	.00	16	56	56	136	76	76	7.7	.00	e.00
2	.00	e.10	.00	18	67	60	138	69	73	e5.0	.00	.00
3	.00	e.00	.00	e19	e11	53	137	53	63	e2.1	.00	.00
4	.00	.00	.00	e13	e7.0	48	145	45	54	e1.0	.00	.00
5	.00	.00	.00	e7.0	e3.0	43	153	44	48	e.40	.00	.00
6	.00	.00	.00	e3.0	e2.0	48	175	42	45	e.20	.00	.00
7	.00	.00	.00	e120	e1.0	63	250	47	39	e.00	.00	.00
8	.00	.00	.00	623	e65	120	146	56	39	.00	.00	.00
9	.00	.00	.00	103	636	161	138	55	34	.00	.00	.00
10	.00	.00	.00	193	280	167	150	54	27	.00	.00	.00
11	.00	.00	.00	420	91	272	152	40	20	.00	.00	.00
12	.00	.00	.00	26	72	342	154	40	15	.00	.00	.00
13	.00	.00	.00	e5.4	44	164	133	49	12	.00	.00	e18
14	.00	.00	.00	e5.4	21	121	113	50	10	.00	.00	e.40
15	.00	.00	.00	35	14	124	102	40	14	.00	.00	e.00
16	.00	.00	.00	47	12	282	96	63	16	.00	.00	.00
17	.00	.00	.00	551	10	369	108	63	27	.00	.00	.00
18	.00	.00	.00	173	7.8	389	119	71	30	.00	.00	.00
19	.00	.00	.00	628	40	634	117	69	35	.00	.00	.00
20	.00	.00	.00	144	1820	541	88	65	25	.00	.00	.00
21	.00	.00	.00	35	424	511	78	76	15	.00	e4.0	.00
22	.00	.00	.00	25	132	534	85	93	14	.00	9.0	.00
23	.00	.00	.00	27	79	442	103	86	13	.00	e1.0	.00
24	.00	.00	.00	18	76	400	133	80	13	.00	e.00	.00
25	.00	.00	.00	e7.0	94	402	121	78	13	.00	.00	.00
26	.00	.00	.00	e11	74	387	100	77	14	.00	e.80	.00
27	.00	.00	.00	e6.0	60	400	92	97	10	.00	e.00	.00
28	.00	.00	e9.0	e4.0	57	400	102	103	8.3	.00	.00	.00
29	e.10	.00	21	e2.0	---	267	98	103	7.4	.00	.00	.00
30	e.70	.00	54	e6.0	---	156	97	98	7.3	.00	e12	.00
31	e1.5	---	22	21	---	145	---	87	---	.00	e.70	---
TOTAL	2.30	0.50	106.00	3311.8	4255.8	8101	3759	2069	817.0	16.40	27.50	18.40
MEAN	.074	.017	3.42	107	152	261	125	66.7	27.2	.53	.89	.61
MAX	1.5	.40	54	628	1820	634	250	103	76	7.7	12	18
MIN	.00	.00	.00	2.0	1.0	43	78	40	7.3	.00	.00	.00
AC-FT	4.6	1.0	210	6570	8440	16070	7460	4100	1620	33	55	36

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1993, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	4.14	10.8	3.41	15.6	33.7	77.1	38.2	17.0
MAX	9.78	57.7	12.4	107	152	261	125	66.7
(WY)	1987	1988	1986	1993	1993	1993	1993	1988
MIN	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1989	1990	1989	1990	1990	1991	1989	1991

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1986 - 1993

ANNUAL TOTAL	808.62	22484.70	18.2	1993
ANNUAL MEAN	2.21	61.6	61.6	1990
HIGHEST ANNUAL MEAN			.65	1993
LOWEST ANNUAL MEAN				1985
HIGHEST DAILY MEAN	70	1820	1820	Feb 20 1993
LOWEST DAILY MEAN	.00	.00	.00	Oct 1 1985
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00	Oct 21 1985
ANNUAL RUNOFF (AC-FT)	1600	44600	13190	
10 PERCENT EXCEEDS	5.6	148	40	
50 PERCENT EXCEEDS	.00	5.4	.00	
90 PERCENT EXCEEDS	.00	.00	.00	

e Estimated

## SAN JUAN RIVER BASIN

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09378600 MONTEZUMA CREEK NEAR BLUFF, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1985 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
JAN , 1993										
20...	1530	61	800	8.3	5.0	7.5	180	46	15	100
FEB										
10...	1200	324	810	8.2	7.0	4.5	200	51	18	95
MAR										
16...	1200	3.5	2140	8.2	17.0	11.0	920	170	120	150
APR										
21...	1050	75	1390	8.3	18.5	12.0	570	120	66	100

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
JAN , 1993										
20...	55	3	3.6	210	30	0.40	8.4	507	0.69	82.8
FEB										
10...	50	3	3.3	220	36	0.30	7.8	523	0.71	457
MAR										
16...	26	2	6.2	840	150	0.20	9.7	1550	2.11	14.8
APR										
21...	27	2	3.1	510	77	0.20	8.1	971	1.32	196

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
JAN , 1993									
20...	0.400	0.400	0.020	0.420	0.020	0.03	--	0.040	0.12
FEB									
10...	--	--	--	--	--	--	0.043	--	--
MAR									
16...	--	--	--	--	--	--	0.037	--	--
APR									
21...	--	--	--	--	--	--	0.023	--	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)
JAN , 1993		
20...	1530	50
FEB		
10...	1200	50
MAR		
16...	1200	80
APR		
21...	1050	60

## SAN JUAN RIVER BASIN

09378630 RECAPTURE CREEK NEAR BLANDING, UT

LOCATION.--Lat 37°45'20", long 109°28'33", in NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 11, T. 35 S., R. 22 E., San Juan County, Hydrologic Unit 14080201, on right bank 100 ft below road fork, 1.9 mi north of Manti-LaSal National Forest boundary, and 9.4 mi north of Blanding.

DRAINAGE AREA.--3.77 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,200 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 142 ft<sup>3</sup>/s Oct. 20, 1972, gage height, 2.14 ft; no flow many days most years.EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8.0 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 10	1606	14.0	1.30	Apr. 18	1733	36.0	1.58
Mar. 22	1717	45.0	1.65	May 4	0339	21.0	1.41
Apr. 3	1729	14.0	1.31	May 17	1014	*50.0	*1.69
Apr. 11	1901	36.0	1.58	May 27	0147	29.0	1.51

No flow, Oct. 24-25, 28, 30-31, Nov. 26-Dec. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	.01	e.02	e.03	1.1	7.9	15	12	2.8	.05	.03
2	.01	.01	.01	e.02	e.02	1.81	8.5	12	12	2.5	.04	.03
3	.01	.01	.01	.02	e.02	1.2	9.6	15	11	2.4	.04	.03
4	.01	.01	.01	.02	e.02	2.1	9.8	20	9.4	2.3	.04	.03
5	.01	.01	.01	.02	e.02	3.4	11	17	8.3	2.1	.04	.03
6	.01	.01	.01	.02	e.03	4.4	8.4	13	7.8	1.7	.03	.03
7	.01	.01	.01	.02	e.03	6.8	7.4	13	7.3	.62	.03	.03
8	.01	.01	.01	.02	e.03	9.7	7.1	11	6.4	.38	.03	.03
9	.01	.01	.01	.02	.03	10	12	10	5.5	.27	.03	.02
10	.01	.01	.01	.02	.03	12	15	10	4.9	.22	.04	.02
11	.01	.01	.01	.02	.03	9.8	19	12	5.1	.20	.03	.02
12	.01	.01	.01	.02	.03	7.9	17	17	6.0	.14	.03	.02
13	.01	.01	.01	.02	.03	7.0	12	23	7.0	.08	.03	.03
14	.01	.01	.01	.02	.03	7.0	11	22	7.5	.08	.03	.03
15	.01	.01	.01	.02	.03	9.8	12	24	7.7	.08	.03	.03
16	.01	.01	.01	.03	.03	13	14	35	7.4	.08	.03	.03
17	.01	.01	.01	.03	.03	13	18	41	7.3	.07	.03	.03
18	.01	.01	.01	.03	.03	17	25	31	6.2	.07	.03	.03
19	.01	.01	.01	.03	.30	18	20	23	5.0	.07	.03	.03
20	.01	.01	.01	e.03	.46	16	17	21	4.6	.07	.03	.03
21	.01	.01	.01	e.02	.56	23	18	18	4.7	.07	.03	.03
22	.01	.01	.01	e.02	.35	26	21	22	4.8	.07	.03	.02
23	.01	.01	.02	e.02	.44	16	24	18	4.5	.06	.03	.02
24	.01	.01	.02	e.01	.61	21	22	14	4.2	.06	.02	.03
25	.01	.01	.02	e.01	.51	22	19	17	3.8	.06	.03	.03
26	.01	.01	.02	e.01	.32	24	22	22	3.4	.06	.04	.03
27	.01	.00	.02	e.02	.37	16	24	26	3.3	.06	.03	.03
28	.01	.00	.02	e.02	.59	8.1	22	18	3.3	.05	.03	.03
29	.01	.00	.02	e.02	---	7.1	23	14	3.3	.05	.03	.02
30	.01	.00	e.02	e.03	---	7.1	19	12	3.1	.05	.03	.03
31	.01	---	e.02	e.03	---	7.0	---	12	---	.05	.03	---
TOTAL	0.31	0.26	0.40	0.66	5.01	347.31	475.7	578	186.8	16.87	1.00	0.83
MEAN	.010	.009	.013	.021	.18	11.2	15.9	18.6	6.23	.54	.032	.028
MAX	.01	.01	.02	.03	.61	26	25	41	12	2.8	.05	.03
MIN	.01	.00	.01	.01	.02	.81	7.1	10	3.1	.05	.02	.02
AC-FT	.6	.5	.8	1.3	9.9	689	944	1150	371	33	2.0	1.6

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1993, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	.21	.16	.060	.040	.12	1.60	5.35	7.11	2.46	.15	.062	.020																
MAX	4.77	2.32	.67	.64	.68	11.2	15.9	25.1	13.6	.67	.73	.085																
(WY)	1973	1988	1973	1973	1980	1993	1993	1983	1983	1979	1968	1988																
MIN	.000	.000	.000	.000	.000	.000	.000	.002	.000	.002	.000	.000																
(WY)	1979	1977	1977	1968	1977	1977	1977	1977	1977	1990	1972	1966																

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1966 - 1993

	1992	1993	1966-1993
ANNUAL TOTAL	464.45	1613.15	
ANNUAL MEAN	1.27	4.42	1.45
HIGHEST ANNUAL MEAN			4.60
HIGHEST DAILY MEAN	15	41	57
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
ANNUAL RUNOFF (AC-FT)	921	3200	1050
10 PERCENT EXCEEDS	4.8	17	4.2
50 PERCENT EXCEEDS	.02	.03	.03
90 PERCENT EXCEEDS	.01	.01	.00

e Estimated

## SAN JUAN RIVER BASIN

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09378650 RECAPTURE CREEK BELOW JOHNSON CREEK, NEAR BLANDING, UT

LOCATION.--Lat 37°40'51", long 109°27'43", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, sec. 2, T. 36 S., R. 22 E., San Juan County, Hydrologic Unit 14080201, on left bank 0.2 mi downstream from Johnson Creek, 1.5 mi upstream from U.S. Highway 191 and 4.3 mi northwest of Blanding.

DRAINAGE AREA.--50.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1975 to September 1993 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 6,120 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 695 ft<sup>3</sup>/s Mar. 14, 1981, gage height, 5.67 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 230 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
March 25	1829	*255	*4.13	No other peak greater than base discharge.			
No flow many days.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.38	.00	.00	e.42	10	68	94	69	9.2	.00	.00
2	.00	.12	.00	.00	e.39	12	68	86	68	5.2	.00	.00
3	.00	.00	.00	.00	e.40	13	76	86	61	3.4	.00	.00
4	.00	.00	.00	.00	e.42	14	80	98	52	2.9	.00	.00
5	.00	.00	.00	.00	e.44	15	88	86	45	2.5	.00	.00
6	.00	.00	.00	.00	e.60	16	81	80	41	2.0	.00	.00
7	.00	.00	.00	.00	e.64	19	65	79	37	1.3	.00	.00
8	.00	.00	.00	.00	e.80	25	66	75	33	.63	.00	.00
9	.00	.00	.00	.00	e1.0	26	74	70	29	.46	.00	.00
10	.00	.00	.00	.00	e1.5	27	70	69	25	.38	.00	.00
11	.00	.00	.00	e.16	e2.0	29	83	77	25	.31	.00	.00
12	.00	.00	.00	e.22	e2.1	23	79	79	28	.23	.00	.00
13	.00	.00	.00	e.34	e2.2	19	69	92	31	.09	.00	.00
14	.00	.00	.00	e.39	e2.3	16	67	83	33	.06	.00	.00
15	.00	.00	.00	e.34	e2.5	20	67	95	34	.04	.00	.00
16	.00	.00	.00	e.42	e2.6	29	69	132	33	.04	.00	.00
17	.00	.00	.00	e.44	2.6	33	83	147	32	.03	.00	.00
18	.00	.00	.00	e.44	2.6	60	93	129	27	.02	.00	.00
19	.00	.00	.00	e.42	e3.2	71	99	111	21	.02	.00	.00
20	.00	.00	.00	e.40	e4.5	61	96	107	28	.01	.00	.00
21	.00	.00	.00	e.40	e6.5	77	102	99	30	.00	.00	.00
22	.00	.00	.00	e.40	e4.8	77	117	122	32	.00	.00	.00
23	.00	.00	.00	e.38	e6.0	95	130	95	35	.00	.00	.00
24	.00	.00	.00	e.34	8.8	114	126	71	28	.00	.00	.00
25	.73	.00	.00	e.30	5.7	128	113	82	21	.00	.00	.00
26	.78	.00	.00	e.31	4.4	124	113	100	14	.00	.00	.00
27	.04	.00	.00	e.40	6.0	90	120	115	12	.00	.19	.00
28	.37	.00	.00	e.40	7.9	67	114	93	15	.00	.00	.00
29	1.0	.00	.00	e.40	---	63	118	86	15	.00	.00	.00
30	.65	.00	.00	e.44	---	63	115	79	13	.00	.00	.00
31	3.9	---	.00	e.44	---	63	---	73	---	.00	.00	---
TOTAL	7.47	0.50	0.00	7.78	83.31	1499	2709	2890	967	28.82	0.19	0.00
MEAN	.24	.017	.000	.25	2.98	48.4	90.3	93.2	32.2	.93	.006	.000
MAX	3.9	.38	.00	.44	8.8	128	130	147	69	9.2	.19	.00
MIN	.00	.00	.00	.00	.39	10	65	69	12	.00	.00	.00
AC-FT	15	1.0	.00	15	165	2970	5370	5730	1920	57	.4	.00

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1993, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
1976	.40	2.52	.000	1976	1.00	14.3	.000	1976	.056	.35	.000	1976	.079	.57	.000	1976	1.37	7.30	.000	1976	10.5	48.4	.000	1976
1977	.40	2.52	.000	1977	1.00	14.3	.000	1977	.056	.35	.000	1977	.079	.57	.000	1977	1.37	7.30	.000	1977	10.5	48.4	.000	1977
1978	.40	2.52	.000	1978	1.00	14.3	.000	1978	.056	.35	.000	1978	.079	.57	.000	1978	1.37	7.30	.000	1978	10.5	48.4	.000	1978
1979	.40	2.52	.000	1979	1.00	14.3	.000	1979	.056	.35	.000	1979	.079	.57	.000	1979	1.37	7.30	.000	1979	10.5	48.4	.000	1979
1980	.40	2.52	.000	1980	1.00	14.3	.000	1980	.056	.35	.000	1980	.079	.57	.000	1980	1.37	7.30	.000	1980	10.5	48.4	.000	1980
1981	.40	2.52	.000	1981	1.00	14.3	.000	1981	.056	.35	.000	1981	.079	.57	.000	1981	1.37	7.30	.000	1981	10.5	48.4	.000	1981
1982	.40	2.52	.000	1982	1.00	14.3	.000	1982	.056	.35	.000	1982	.079	.57	.000	1982	1.37	7.30	.000	1982	10.5	48.4	.000	1982
1983	.40	2.52	.000	1983	1.00	14.3	.000	1983	.056	.35	.000	1983	.079	.57	.000	1983	1.37	7.30	.000	1983	10.5	48.4	.000	1983
1984	.40	2.52	.000	1984	1.00	14.3	.000	1984	.056	.35	.000	1984	.079	.57	.000	1984	1.37	7.30	.000	1984	10.5	48.4	.000	1984
1985	.40	2.52	.000	1985	1.00	14.3	.000	1985	.056	.35	.000	1985	.079	.57	.000	1985	1.37	7.30	.000	1985	10.5	48.4	.000	1985
1986	.40	2.52	.000	1986	1.00	14.3	.000	1986	.056	.35	.000	1986	.079	.57	.000	1986	1.37	7.30	.000	1986	10.5	48.4	.000	1986
1987	.40	2.52	.000	1987	1.00	14.3	.000	1987	.056	.35	.000	1987	.079	.57	.000	1987	1.37	7.30	.000	1987	10.5	48.4	.000	1987
1988	.40	2.52	.000	1988	1.00	14.3	.000	1988	.056	.35	.000	1988	.079	.57	.000	1988	1.37	7.30	.000	1988	10.5	48.4	.000	1988
1989	.40	2.52	.000	1989	1.00	14.3	.000	1989	.056	.35	.000	1989	.079	.57	.000	1989	1.37	7.30	.000	1989	10.5	48.4	.000	1989
1990	.40	2.52	.000	1990	1.00	14.3	.000	1990	.056	.35	.000	1990	.079	.57	.000	1990	1.37	7.30	.000	1990	10.5	48.4	.000	1990
1991	.40	2.52	.000	1991	1.00	14.3	.000	1991	.056	.35	.000	1991	.079	.57	.000	1991	1.37	7.30	.000	1991	10.5	48.4	.000	1991
1992	.40	2.52	.000	1992	1.00	14.3	.000	1992	.056	.35	.000	1992	.079	.57	.000	1992	1.37	7.30	.000	1992	10.5	48.4	.000	1992
1993	.40	2.52	.000	1993	1.00	14.3	.000	1993	.056	.35	.000	1993	.079	.57	.000	1993	1.37	7.30	.000	1993	10.5	48.4	.000	1993

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1976 - 1993

ANNUAL TOTAL	2635.41	8193.07	8.64
ANNUAL MEAN	7.20	22.4	24.1
HIGHEST ANNUAL MEAN			.019
LOWEST ANNUAL MEAN			
HIGHEST DAILY MEAN	53	147	212
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
ANNUAL RUNOFF (AC-FT)	5230	16250	6260
10 PERCENT EXCEEDS	30	86	26
50 PERCENT EXCEEDS	.00	.34	.00
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated



## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT

LOCATION.--Lat 37°08'49", long 109°51'51", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 42 S., R. 19 E., San Juan County, Hydrologic Unit 14080205, on left bank 1,600 ft downstream from Gypsum Creek, 1,800 ft upstream from highway bridge, 20 mi southwest of Bluff, at mile 113.5.

DRAINAGE AREA.--23,000 mi<sup>2</sup>, approximately.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1940. WSP 1313: 1917, 1929. WSP 1343: 1945.

GAGE.--Water-stage recorder. Datum of gage is 4,048 ft above sea level, from levels of Topographic Division, U.S. Geological Survey. Prior to Mar. 16, 1927, chain gages at sites about 1,700 ft downstream at different datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of approximately 200,000 acres above station. No diversion between station and mouth of river. Flow regulated by Navajo Reservoir since June 28, 1962 (see station 09355100 in New Mexico report).

EXTREMES FOR PERIOD OF RECORD.--(water years 1914-17, 1927-93) maximum discharge, 70,000 ft<sup>3</sup>/s Sept. 10, 1927, gage height, 32.0 ft from rating curve extended above 31,000 ft<sup>3</sup>/s and slope-area measurement at gage height 26.62 ft; no flow July 3-13, 1934, Aug. 24-27, 29, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 6, 1911, which is greatest known at Shiprock, NM, probably exceeded that of Sept. 10, 1927 at this station but stage was not accurately determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 20	1822	*12,500	*11.80	June 19	0726	9,450	10.17
May 30	1134	9,900	10.42				

Minimum, 433 ft<sup>3</sup>/s Aug. 07.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	934	1360	921	e1250	1290	3460	6030	7730	8330	4270	678	3310
2	843	1320	920	e1180	1370	3660	5940	7660	8670	4080	625	3140
3	848	1200	969	e1170	1270	3960	5880	7220	9230	3840	581	2270
4	826	1130	998	e990	1180	4180	5920	6830	9420	3300	544	2070
5	813	1080	1090	e970	1060	4320	6050	6860	9120	3120	509	1790
6	790	1040	1090	e1000	979	4510	6320	7020	7980	2820	497	1710
7	773	1020	1070	e1200	985	4590	6480	6680	7350	2390	445	1540
8	746	956	1020	e2500	1080	4820	6180	6330	7220	2200	447	1390
9	736	958	980	e5190	4610	5040	5890	6200	6890	2130	485	1210
10	729	969	1010	4110	3330	5130	5850	6020	6490	2120	524	1110
11	799	1010	1010	3960	2320	5350	6030	5470	6230	2030	564	1000
12	791	1010	959	2070	1760	5680	6310	4890	6230	1970	798	933
13	814	1050	964	1460	1580	5580	6510	4820	6230	1880	576	1250
14	815	977	964	1230	1370	5060	6510	5260	6990	1760	596	2240
15	811	944	981	1240	1310	4890	6230	5690	7830	1600	982	2420
16	734	923	983	1220	1210	5030	6030	6250	8440	1500	1750	1950
17	762	915	957	3670	1170	5810	5910	6880	8880	1410	1450	1580
18	852	959	923	2910	1170	6280	6020	7570	9280	1340	1090	1390
19	858	982	908	5740	1220	6670	6230	7160	8980	1270	937	1330
20	850	968	999	4150	8230	7340	6400	6380	6560	1170	883	1210
21	864	1000	e930	2950	5720	6860	6070	6240	5900	1080	896	1150
22	843	1030	e900	2050	3590	6700	6040	6510	6420	973	1710	1060
23	849	985	e920	1660	2410	6790	6350	7120	6940	895	1520	952
24	878	989	e890	1470	2020	6760	6780	7290	6600	869	1770	918
25	971	981	e920	1310	2460	6940	7200	6580	6060	815	1290	876
26	1100	947	e950	1230	2710	7170	7030	6480	5520	788	1290	796
27	1120	899	e940	1160	2950	7350	6790	7030	5240	784	1190	830
28	1040	883	e1070	1070	3270	7580	7020	8050	5140	797	1380	792
29	1100	885	e1020	1060	---	7170	7210	9050	4950	742	2680	741
30	1200	960	e1200	1100	---	6700	7540	9650	4580	704	4840	722
31	1310	---	e1350	1260	---	6280	---	8750	---	660	3440	---
TOTAL	27399	30330	30806	63530	63624	177660	190750	211670	213700	55307	36967	43680
MEAN	884	1011	994	2049	2272	5731	6358	6828	7123	1784	1192	1456
MAX	1310	1360	1350	5740	8230	7580	7540	9650	9420	4270	4840	3310
MIN	729	883	890	970	979	3460	5850	4820	4580	660	445	722
AC-FT	54350	60160	61100	126000	126200	352400	378400	419800	423900	109700	73320	86640

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915-17, 1927-93, BY WATER YEAR (WY)

	1915	1916	1917	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
MEAN	1576	1244	1113	1137	1475	1918	3617	5392	5700	2595	1794	1641																																																																																															
MAX	10650	4435	3821	3374	3683	6209	10120	21520	15380	9212	9335	11870																																																																																															
(WY)	1942	1987	1966	1986	1987	1916	1942	1941	1941	1957	1929	1927																																																																																															
MIN	205	345	408	335	519	463	399	339	556	236	80.4	64.5																																																																																															
(WY)	1957	1935	1957	1931	1964	1964	1977	1977	1977	1963	1939	1956																																																																																															

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1915-17, 1927-93

	1992	1993	1915-17	1927-93
ANNUAL TOTAL	744073	1145423		
ANNUAL MEAN	2033	3138		
HIGHEST ANNUAL MEAN			2323	
LOWEST ANNUAL MEAN			5859	1941
HIGHEST DAILY MEAN	8510	9650	844	1977
LOWEST DAILY MEAN	495	445	52000	Jun 30 1927
ANNUAL SEVEN-DAY MINIMUM	567	493	.00	Jul 3 1934
ANNUAL RUNOFF (AC-FT)	1476000	2272000	1683000	Jul 3 1934
10 PERCENT EXCEEDS	5220	7020	6020	
50 PERCENT EXCEEDS	1120	1470	1350	
90 PERCENT EXCEEDS	767	815	492	

e Estimated

## SAN JUAN RIVER BASIN

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09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1929 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1977, October 1980 to current year.

WATER TEMPERATURES: May 1944 to September 1961, October 1964 to current year.

SUSPENDED-SEDIMENT DISCHARGE: July 1929 to September 1980.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

INSTRUMENTATION.--Water-quality monitor since October 1980.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,790 microsiemens Sept. 19, 1959; minimum daily, 208 microsiemens June 17, 1952.

WATER TEMPERATURES: Maximum, 33.0°C July 31, 1959; minimum, 0.0°C on many days during winter period of most years.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 383,000 mg/L Sept. 21, 1929; minimum daily mean, no flow on several days in 1934 and 1939.

SEDIMENT LOADS: Maximum daily, 15,700,000 tons Oct. 20, 1972; minimum daily, 0 tons on several days in 1934 and 1939.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,190 microsiemens Aug. 11; minimum observed, 340 microsiemens July 3, 7.

WATER TEMPERATURES: Maximum recorded, 28.5°C Aug. 1; minimum recorded, 0.6°C Dec. 30.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT 05... 1992	1300	813	820	8.4	24.0	16.5	--	8.9	653	--	--	330
NOV 23... 1992	1100	962	870	8.5	8.0	5.5	1	11.1	650	<1	<1	310
JAN 20... 1993	1115	4000	820	8.2	8.0	4.5	--	11.4	658	--	--	--
FEB 23... 1993	1220	2300	1240	8.1	8.5	5.0	--	10.7	650	--	--	370
MAR 24... 1993	1120	6880	520	8.2	16.0	10.0	270	10.1	660	<1	<1	200
APR 20... 1993	1320	6600	450	8.2	23.0	10.5	--	9.8	652	--	--	180
MAY 19... 1993	1110	7200	380	8.2	27.0	15.5	--	8.3	660	<1	<1	--
JUN 24... 1993	1245	6590	270	8.1	32.0	18.0	--	7.7	650	--	--	110
JUL 22... 1993	1130	985	620	8.4	29.0	23.0	2.1	7.1	658	<1	<1	260
AUG 19... 1993	1300	980	780	8.4	36.0	23.0	--	7.2	660	--	--	320

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 05... 1992	88	26	54	26	1	3.1	--	--	--	270	15	0.30
NOV 23... 1992	83	25	58	29	1	2.8	7	158	142	290	16	0.30
JAN 20... 1993	--	--	--	--	--	--	--	--	--	--	--	--
FEB 23... 1993	97	30	110	39	3	3.4	--	--	--	380	26	0.30
MAR 24... 1993	51	17	31	25	1	2.7	0	130	108	140	10	0.20
APR 20... 1993	48	14	36	30	1	2.0	--	--	--	120	31	0.20
MAY 19... 1993	--	--	--	--	--	--	0	105	86	--	--	--
JUN 24... 1993	33	7.0	13	20	0.5	1.6	--	--	--	63	3.4	0.20
JUL 22... 1993	77	16	40	25	1	2.1	7	130	118	180	13	0.30
AUG 19... 1993	95	20	51	25	1	4.7	--	--	--	250	16	0.40

## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT, 1992												
05...	4.9	563	548	0.77	1240	--	--	--	<0.010	--	<0.050	--
NOV												
23...	5.4	595	567	0.81	1550	0.100	--	0.020	<0.010	0.120	0.110	0.030
JAN, 1993												
20...	--	--	--	--	--	1.38	1.38	--	0.020	--	1.40	--
FEB												
23...	7.6	808	754	1.10	5020	--	--	--	--	--	--	--
MAR												
24...	10	339	328	0.46	6300	0.240	--	--	<0.010	--	0.240	--
APR												
20...	10	348	325	0.47	6200	0.120	--	--	<0.010	--	0.120	--
MAY												
19...	--	--	--	--	--	0.170	--	--	<0.010	--	0.170	--
JUN												
24...	7.0	194	175	0.26	3450	0.120	--	--	<0.010	--	0.120	--
JUL												
22...	3.1	397	404	0.54	1060	--	--	--	<0.010	--	<0.050	--
AUG												
19...	10	552	541	0.75	1460	0.530	--	--	<0.010	--	0.530	--

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT, 1992											
05...	0.030	0.04	--	--	--	--	--	--	--	0.020	0.06
NOV											
23...	0.020	0.03	0.17	0.20	0.32	1.4	0.060	<0.010	<0.010	<0.010	--
JAN, 1993											
20...	0.030	0.04	--	--	--	--	--	--	--	0.030	0.09
FEB											
23...	--	--	--	--	--	--	--	--	--	--	--
MAR											
24...	0.020	0.03	0.68	0.70	0.94	--	0.230	<0.010	--	0.020	0.06
APR											
20...	0.020	0.03	--	--	--	--	--	--	--	<0.010	--
MAY											
19...	0.030	0.04	1.2	1.2	1.4	--	0.460	0.010	--	0.010	0.03
JUN											
24...	0.020	0.03	--	--	--	--	--	--	--	0.010	0.03
JUL											
22...	0.020	0.03	0.78	0.80	0.80	--	0.030	<0.010	--	<0.010	--
AUG											
19...	0.030	0.04	--	--	--	--	--	--	--	0.010	0.03

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
NOV, 1992									
23...	1100	<10	--	64	<3	--	<3	--	38
MAR, 1993									
24...	1120	10	--	91	<3	--	15	--	20
JUL									
22...	1130	80	<1	88	<3	2	<3	<1	32

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV, 1992								
23...	<1	<10	<1	1	<1.0	1200	<6	--
MAR, 1993								
24...	2	<10	<1	1	<1.0	640	<6	--
JUL								
22...	1	1	<1	<2	<1.0	890	<1	<10



## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	450	370	407	810	680	732	901	640	739
2	---	---	---	450	370	403	790	700	740	840	650	711
3	---	---	---	470	340	424	800	700	744	800	690	747
4	---	---	---	490	350	425	810	690	756	750	660	712
5	---	---	---	500	360	431	780	690	746	760	690	722
6	---	---	---	510	380	439	800	730	759	770	690	726
7	---	---	---	520	340	456	830	760	787	780	690	732
8	---	---	---	550	460	499	860	760	821	790	690	736
9	---	---	---	560	410	515	860	800	827	790	690	747
10	---	---	---	560	460	515	1030	760	826	820	740	779
11	---	---	---	540	430	499	2190	800	932	840	740	778
12	---	---	---	550	480	514	1100	840	928	830	750	795
13	---	---	---	570	450	519	920	800	863	860	770	809
14	---	---	---	590	450	528	950	830	874	1080	780	872
15	---	---	---	580	490	549	890	790	832	1130	810	945
16	---	---	---	600	520	557	930	780	838	950	817	903
17	---	---	---	613	450	560	1090	810	925	930	850	890
18	---	---	---	630	550	577	880	800	836	900	830	872
19	---	---	---	650	560	607	870	760	827	870	790	838
20	---	---	---	640	570	604	830	790	810	860	770	822
21	---	---	---	700	550	623	1120	770	842	870	760	833
22	---	---	---	670	600	629	880	780	820	860	750	810
23	---	---	---	680	620	648	1350	790	1080	870	750	808
24	---	---	---	730	640	679	1160	760	917	880	800	846
25	---	---	---	730	660	687	1090	812	940	890	790	854
26	---	---	---	760	660	694	960	800	853	890	790	864
27	---	---	---	750	660	698	960	770	847	920	810	885
28	---	---	---	750	650	694	880	750	826	900	800	863
29	---	---	---	740	650	707	950	780	872	900	810	858
30	---	---	---	760	690	719	1120	830	930	920	810	869
31	---	---	---	790	660	720	990	800	918	---	---	---
MONTH	---	---	---	790	340	565	2190	680	847	1130	640	812

## SAN JUAN RIVER BASIN

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09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.8	17.7	18.8	13.8	10.9	11.8	2.1	1.2	1.7	3.6	2.1	2.7
2	19.7	17.6	18.7	13.6	9.8	10.7	2.2	1.3	1.8	4.1	3.5	3.8
3	19.4	17.3	18.4	9.8	8.4	8.9	2.9	1.4	2.1	4.1	2.7	3.4
4	18.8	16.9	18.0	8.4	6.5	7.3	3.3	2.7	3.0	2.8	1.1	1.5
5	18.5	16.3	17.6	7.8	6.4	7.1	2.7	1.6	2.0	1.3	.8	1.2
6	18.5	16.8	17.8	7.8	6.6	7.3	2.0	1.3	1.7	2.1	1.3	1.6
7	17.0	14.8	15.9	8.6	6.6	7.4	2.3	1.6	1.9	2.4	2.1	2.2
8	15.5	13.4	14.3	8.6	6.5	7.5	1.8	1.2	1.5	3.9	2.4	3.0
9	14.6	12.6	13.8	9.2	7.5	8.3	3.8	1.3	2.1	4.6	3.4	3.8
10	15.2	13.2	14.4	9.4	8.5	8.9	2.9	2.0	2.6	4.6	4.1	4.4
11	15.3	13.6	14.6	9.0	7.4	8.0	3.1	2.3	2.7	4.3	3.9	4.1
12	15.6	13.6	14.6	8.5	6.2	7.0	3.9	2.0	2.6	3.9	2.3	2.9
13	15.9	14.0	14.9	8.0	5.6	6.5	3.1	2.2	2.7	3.1	2.3	2.7
14	16.1	14.6	15.4	7.0	5.5	6.3	3.9	1.1	2.5	4.6	2.8	3.5
15	16.3	14.7	15.7	7.4	5.9	6.6	3.5	1.1	2.9	5.1	4.3	4.6
16	16.1	14.9	15.5	7.8	6.3	7.1	3.5	1.0	2.5	5.2	5.0	5.1
17	15.6	14.1	15.0	8.7	6.7	7.4	3.6	.9	2.7	5.7	4.6	5.1
18	15.6	13.8	14.8	8.4	7.1	7.8	3.5	1.0	2.4	5.9	5.3	5.6
19	15.4	13.9	14.7	8.7	7.4	8.1	1.6	.9	1.4	6.2	5.7	5.9
20	15.3	13.7	14.7	8.8	7.4	8.1	3.7	1.0	1.9	6.0	4.7	5.2
21	16.3	14.5	15.4	7.4	6.1	6.6	3.7	.9	1.7	5.2	4.0	4.6
22	16.6	14.9	15.9	8.5	5.8	6.5	3.5	1.0	1.5	5.3	4.1	4.6
23	17.0	15.4	16.3	7.5	---	---	3.7	.9	2.3	5.3	4.1	4.6
24	17.2	15.7	16.6	5.7	---	---	1.7	1.1	1.5	4.5	3.3	3.8
25	17.0	16.0	16.6	3.9	---	---	1.7	1.0	1.5	3.8	2.7	3.2
26	16.7	14.9	15.6	3.3	1.7	2.3	1.7	1.0	1.5	3.7	2.8	3.2
27	16.0	14.5	15.0	2.3	1.0	1.6	1.7	.9	1.4	3.9	2.9	3.5
28	15.4	14.7	15.0	2.3	1.0	1.7	1.4	.8	1.1	4.2	3.0	3.6
29	15.0	14.0	14.3	2.4	1.3	1.9	1.1	.8	1.1	5.3	3.5	4.2
30	14.2	12.8	13.2	2.4	1.2	1.8	1.3	.6	1.0	5.8	5.1	5.4
31	13.3	12.2	12.8	---	---	---	2.1	1.2	1.5	6.3	5.3	5.8
MONTH	19.8	12.2	15.6	13.8	---	---	3.9	.6	2.0	6.3	.8	3.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	6.3	5.5	5.9	10.3	8.3	9.3	11.1	9.3	10.2	14.5	12.6	13.6
2	6.1	4.8	5.5	10.0	7.9	8.8	11.6	10.1	10.8	14.4	11.6	12.9
3	6.2	5.3	5.8	8.6	6.2	7.4	11.4	8.9	10.0	14.3	11.3	12.7
4	6.1	4.9	5.5	8.3	6.5	7.4	11.3	9.2	10.4	14.5	12.5	13.6
5	5.7	4.4	5.1	8.3	6.1	7.2	11.4	10.4	10.9	14.0	12.4	13.1
6	5.9	4.4	5.1	9.0	6.7	7.8	11.0	10.1	10.6	13.4	11.1	12.2
7	6.5	5.3	5.8	9.9	7.4	8.6	10.5	8.7	9.6	14.5	12.4	13.2
8	6.5	6.0	6.2	10.3	8.2	9.2	10.8	8.0	9.3	14.4	12.4	13.1
9	6.7	5.3	5.9	10.2	8.4	9.4	11.6	9.2	10.3	13.7	11.1	12.0
10	7.1	5.6	6.3	10.5	8.5	9.5	12.8	10.4	11.4	15.0	11.4	12.9
11	7.1	5.4	6.1	10.2	9.1	9.5	13.4	11.0	12.2	16.4	13.1	14.3
12	6.9	5.5	6.1	9.2	7.5	8.2	13.3	11.4	12.2	17.5	14.1	15.6
13	6.8	5.6	6.2	8.1	6.0	6.8	11.7	9.7	10.8	18.9	15.4	16.9
14	6.5	5.4	5.7	7.1	5.7	6.4	11.5	9.1	10.3	19.1	16.1	17.7
15	6.4	5.0	5.6	9.3	6.8	7.7	11.4	8.7	10.1	19.1	16.0	17.8
16	6.6	5.6	6.1	11.1	8.6	9.6	13.0	10.4	11.4	18.4	15.9	17.1
17	7.7	6.1	6.9	10.9	9.4	9.9	13.8	11.0	12.2	17.1	15.2	15.8
18	7.7	6.5	7.0	10.2	8.9	9.6	13.8	12.1	12.9	16.4	14.0	15.3
19	8.7	7.1	7.7	11.2	8.9	10.0	13.3	10.6	12.0	17.9	14.4	15.7
20	8.7	7.0	7.7	11.2	9.4	10.2	12.6	9.8	11.4	18.3	15.3	16.9
21	7.0	5.5	6.1	11.0	8.8	9.9	13.1	10.6	11.5	18.7	16.4	17.7
22	6.4	5.2	5.9	11.2	8.9	10.1	13.6	11.1	12.3	18.7	16.2	17.7
23	7.0	5.2	6.1	11.4	9.1	10.3	14.6	11.8	13.0	18.7	15.4	17.1
24	7.0	6.5	6.7	11.5	9.4	10.6	14.5	12.8	13.7	18.2	15.0	16.7
25	7.1	5.5	6.3	12.2	9.7	10.9	14.6	11.7	13.2	18.1	15.2	16.9
26	7.8	6.5	7.1	12.2	10.7	11.5	14.6	11.7	13.2	18.4	16.3	17.5
27	8.8	6.5	7.5	11.5	9.0	10.3	15.4	12.9	14.0	17.8	16.3	17.2
28	9.6	7.9	8.7	9.0	8.1	8.4	16.0	13.6	14.8	17.8	15.4	16.8
29	---	---	---	10.2	7.6	8.6	15.9	12.9	14.4	18.0	14.7	16.3
30	---	---	---	10.4	8.7	9.6	15.2	12.8	14.2	18.1	14.5	16.3
31	---	---	---	11.0	8.5	9.6	---	---	---	18.1	14.8	16.5
MONTH	9.6	4.4	6.3	12.2	5.7	9.1	16.0	8.0	11.8	19.1	11.1	15.5



## SAN JUAN RIVER BASIN

09379500 SAN JUAN RIVER NEAR BLUFF, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	17.7	14.6	16.3	22.8	19.1	21.0	28.5	26.1	27.7	23.1	20.7	22.0
2	17.7	15.6	16.6	22.8	19.5	21.5	28.1	25.3	26.9	23.1	20.7	21.9
3	17.2	14.8	15.9	22.5	19.9	21.3	27.4	25.5	26.8	22.8	20.6	21.7
4	16.6	13.8	15.1	22.4	20.1	21.3	26.9	25.3	26.2	23.3	20.4	21.9
5	15.7	13.4	14.2	22.5	20.0	21.2	27.4	24.6	25.7	23.9	21.3	22.5
6	14.3	13.0	13.7	23.1	20.3	21.8	27.9	25.0	26.4	24.2	21.8	22.8
7	15.5	12.4	13.7	24.5	21.1	22.8	27.4	24.9	26.2	24.2	21.9	23.0
8	15.8	14.2	15.1	24.8	22.1	23.7	27.1	25.1	26.1	23.4	21.3	22.4
9	16.5	13.8	15.1	25.4	22.5	24.0	27.1	23.9	25.3	23.4	20.8	22.1
10	17.3	14.3	15.8	25.9	23.0	24.6	27.3	24.6	25.9	23.5	20.9	22.2
11	17.6	15.0	16.4	26.8	23.5	25.3	26.7	24.6	25.8	23.5	21.4	22.6
12	18.4	15.1	16.9	26.7	24.6	25.7	26.9	23.8	25.4	23.5	21.3	22.2
13	19.1	15.5	17.4	25.9	23.4	24.6	25.2	22.9	24.3	22.0	20.4	21.2
14	19.1	16.0	17.8	25.6	23.4	24.6	25.2	23.3	24.2	20.9	17.3	18.4
15	19.0	16.0	17.5	25.6	23.4	24.6	24.3	22.3	23.3	18.9	17.4	18.0
16	18.1	16.1	17.2	25.3	22.9	24.0	23.1	20.1	21.5	18.8	17.4	18.2
17	17.7	15.0	16.6	25.1	22.9	24.0	23.4	21.1	22.2	18.8	16.9	17.9
18	17.4	14.7	16.0	25.6	22.5	24.0	23.5	21.2	22.5	18.7	17.4	17.8
19	17.9	14.5	16.2	25.7	23.7	24.8	24.7	22.7	23.6	19.1	16.7	17.8
20	19.3	15.9	17.4	25.9	23.1	24.7	24.9	23.6	24.3	19.5	17.4	18.5
21	19.7	16.9	18.4	26.0	22.9	24.1	24.9	23.5	24.1	19.7	17.7	18.7
22	19.6	16.7	18.4	24.2	22.1	23.2	24.0	22.2	23.1	20.2	18.1	19.1
23	19.5	16.7	18.3	24.3	22.6	23.6	23.4	19.2	21.1	20.3	18.2	19.2
24	18.8	16.3	17.7	24.5	21.6	22.8	23.8	21.3	22.5	19.6	17.9	18.8
25	19.3	15.8	17.6	25.3	23.2	24.4	23.8	22.0	22.6	19.3	17.3	18.4
26	20.3	16.5	18.3	24.9	22.4	24.0	24.2	21.8	22.8	18.8	16.8	17.9
27	20.7	16.9	19.0	26.0	23.0	24.6	24.3	22.3	23.1	18.7	16.5	17.6
28	20.7	17.5	19.2	27.1	23.8	25.6	23.9	21.1	22.1	18.7	16.5	17.6
29	20.7	17.3	19.0	27.2	24.9	26.3	23.9	22.2	23.1	18.7	16.7	17.9
30	22.4	17.6	20.0	28.2	25.3	26.7	23.3	20.7	22.0	18.8	16.9	17.9
31	---	---	---	28.3	25.2	27.3	23.1	21.7	22.3	---	---	---
MONTH	22.4	12.4	16.9	28.3	19.1	23.9	28.5	19.2	24.2	24.2	16.5	19.9

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JUL, 1993 22...	1130	985	23.0	26	69

COLORADO RIVER MAIN STEM

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09379900 LAKE POWELL AT GLEN CANYON DAM, AZ

LOCATION.--Lat 36°56'12", long 111°29'00", in sec. 24, T. 41 N., R. 8 E., Coconino County, Hydrologic Unit 14070006, at Glen Canyon Dam on Colorado River, 900 ft upstream from bridge on U.S. Highway 89, 1.4 mi downstream from Wahweap Creek, 2 mi northwest of Page, and 12 mi downstream from Utah-Arizona State line.

DRAINAGE AREA.--111,700 mi<sup>2</sup>, approximately, including 3,959 mi<sup>2</sup> in Great Divide Basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,370 ft above sea level. Prior to Sept. 1, 1964, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by concrete-arch gravity dam; storage began Mar. 13, 1963; dam completed September 1963. Total capacity, (from capacity table computed by U.S. Bureau of Reclamation, based on a survey completed in 1985; used since October 1, 1990) 26,215,000 acre-ft, consisting of the following: Dead storage, 1,893,000 acre-ft below elevation 3,370 ft--sill of outlet gates usable contents, 24,322,000 acre-ft between elevations 3,370 ft and 3,700 ft--top of conservation pool. Reservoir is used for power development, to provide storage replacement for upstream irrigation development, and to meet downstream requirements under the Colorado River Compact of 1922. Figures given herein represent usable contents; prior to Oct. 1, 1968, figures of total contents were published (prior to sealing of diversion tunnel July 7, 1965, all storage was usable).

COOPERATION.--Records provided by Bureau of Reclamation.

EXTREMES (at 2400) FOR PERIOD OF RECORD.--Maximum contents, 26,373,000 acre-ft July 14, 1983, elevation, 3,708.34 ft; minimum since power pool level was reached (Aug. 16, 1964), 4,166,000 acre-ft Mar. 18, 1965, elevation, 3,490.76 ft.

EXTREMES (at 2400) FOR CURRENT YEAR.--Maximum contents, 19,659,000 acre-ft July 18, elevation, 3,668.70 ft; minimum, 12,980,000 acre-ft Feb. 19, elevation, 3,612.46 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

3,610	12,730,000	3,635	15,420,000	3,660	18,492,000
3,615	13,240,000	3,640	16,003,000	3,665	19,156,000
3,620	13,763,000	3,645	16,601,000	3,670	19,838,000
3,625	14,300,000	3,650	17,215,000		
3,630	14,852,000	3,655	17,846,000		

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14080	13889	13691	13330	13104	12995	13434	14212	16939	19375	19513	19061
2	14072	13888	13679	13319	13098	13033	13460	14264	17071	19411	19495	19064
3	14064	13887	13668	13313	13090	13003	13486	14307	17209	19447	19469	19056
4	14061	13882	13667	13303	13079	13003	13515	14359	17324	19496	19468	19050
5	14053	13879	13642	13290	13067	13009	13533	14405	17454	19520	19443	19054
6	14042	13874	13634	13276	13055	13014	13554	14454	17561	19547	19423	19036
7	14029	13867	13627	13263	13053	13021	13571	14506	17665	19569	19404	19029
8	14021	13862	13610	13255	13054	13023	13591	14555	17761	19593	19389	19021
9	14015	13856	13597	13255	13048	13032	13615	14605	17852	19604	19373	19010
10	14006	13851	13586	13258	13046	13036	13640	14652	17929	19615	19362	19001
11	13999	13846	13571	13255	13043	13045	13665	14696	17997	19630	19344	18989
12	13992	13838	13564	13256	13041	13053	13681	14733	18067	19639	19328	18987
13	13983	13829	13554	13245	13035	13063	13705	14771	18135	19647	19309	18977
14	13971	13822	13539	13227	13028	13067	13727	14822	18197	19654	19294	18962
15	13964	13818	13525	13219	13024	13077	13745	14879	18270	19654	19271	18949
16	13956	13811	13514	13214	13011	13083	13764	14954	18346	19654	19249	18936
17	13955	13804	13505	13214	13004	13088	13779	15029	18415	19655	19235	18928
18	13949	13797	13494	13211	12991	13106	13816	15121	18509	19659	19216	18925
19	13943	13786	13484	13211	12980	13117	13824	15241	18601	19657	19204	18920
20	13937	13780	13474	13209	12998	13132	13844	15367	18685	19651	19192	18912
21	13930	13774	13462	13203	13012	13159	13867	15490	18761	19643	19171	18904
22	13922	13775	13449	13196	13012	13186	13891	15611	18840	19635	19161	18892
23	13914	13759	13437	13189	13008	13212	13910	15740	18926	19622	19147	18882
24	13908	13748	13424	13183	13011	13237	13943	15873	18994	19621	19131	18877
25	13909	13741	13411	13168	13005	13255	13975	16005	19066	19607	19140	18872
26	13904	13734	13398	13154	13001	13276	14008	16135	19132	19596	19116	18865
27	13902	13726	13386	13139	12997	13302	14043	16256	19196	19586	19103	18856
28	13892	13718	13372	13124	12994	13333	14076	16385	19249	19571	19093	18846
29	13889	13712	13360	13111	---	13360	14113	16519	19294	19559	19079	18837
30	13882	13704	13347	13102	---	13390	14160	16666	19337	19540	19077	18825
31	13892	---	13335	13104	---	13413	---	16805	---	19526	19074	---
MAX	14100	13900	13700	13300	13100	13400	14200	16800	19300	19700	19500	19100
MIN	13900	13700	13300	13100	13000	13000	13400	14200	16900	19400	19100	18800
(#)	3621.21	3619.44	3615.91	3613.68	3612.60	3616.66	3623.70	3646.67	3666.34	3667.73	3664.39	3662.52
(*)	-193	-188	-369	-231	-110	+419	+747	+2645	+2532	+189	-452	-249

CAL YR 1992 . . . . . (\*) -917  
WTR YR 1993 . . . . . (\*) +4740

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in thousands of acre-feet.

## KANAB CREEK BASIN

09403600 KANAB CREEK NEAR KANAB, UT

LOCATION.--Lat 37°06'02", long 112°32'50", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 5, T. 43 S., R. 6 W., Kane County, Hydrologic Unit 15010003, on left bank at upstream side of bridge on U.S. Highway 89, 300 ft upstream from Tiny Canyon and 3.5 mi north of Kanab.

DRAINAGE AREA.--198 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1959 to September 1968 (peaks only). January 1979 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,060 ft above sea level, from topographic map. A crest-stage gage was in operation at this site from July 22, 1959 to Sept. 30, 1968 at different datum. July 6, 1979, to Sept. 18, 1984, water-stage recorder at same site, different datum.

REMARKS.--Records poor. Several diversions above station for irrigation and stock watering.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,030 ft<sup>3</sup>/s, Sept. 8, 1961, gage height, 8.39 ft, from rating curve extended above 31 ft<sup>3</sup>/s on basis of slope area measurement at gage height, 7.09 ft (revised); minimum daily discharge, 3.0 ft<sup>3</sup>/s June 15, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct. 31	0400	a 202	3.78	May 17	2200	a *430	5.21
Mar. 25	2300	a 271	4.08	Aug. 9	1800	b 400	c *6.70

a from rating curve extended above 116 ft<sup>3</sup>/s on basis of slope-area measurement

b estimated

c backwater from flood discharge from Tiny Canyon

Minimum daily discharge, 4.7 ft<sup>3</sup>/s, Aug. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	12	8.2	9.0	11	13	123	16	8.2	7.7	6.4	6.2
2	6.2	12	7.8	9.1	11	12	118	13	8.1	7.5	6.2	6.4
3	6.1	13	8.0	e8.5	11	13	94	12	7.9	8.0	5.9	6.3
4	6.1	12	7.1	e8.0	11	14	95	12	9.0	7.4	6.1	7.0
5	6.4	13	7.2	e9.0	11	13	96	12	8.4	6.5	6.0	6.7
6	6.4	12	7.0	9.8	10	14	77	11	9.2	6.8	6.2	7.2
7	6.7	13	7.0	10	10	14	67	12	8.7	6.9	6.2	6.6
8	6.7	13	6.9	11	13	17	64	12	8.8	7.0	8.1	6.7
9	6.8	13	6.8	9.6	12	22	68	11	8.5	6.6	e25	7.0
10	6.9	14	7.0	10	9.9	53	67	11	7.8	6.5	e15	6.6
11	7.2	14	7.3	9.8	10	58	61	11	7.8	6.9	e9.0	6.9
12	7.2	14	7.1	e11	10	54	61	11	8.4	6.1	9.1	7.0
13	7.6	13	7.5	11	10	34	e50	11	8.3	6.5	8.4	7.1
14	7.3	13	7.8	11	9.9	42	e40	12	7.8	5.6	7.0	7.2
15	7.5	13	6.8	11	9.9	76	e30	12	8.4	4.8	6.2	6.7
16	7.4	13	7.8	13	10	89	e29	13	8.0	4.9	6.1	7.2
17	7.7	13	e6.5	14	9.9	72	e28	36	8.3	4.8	5.9	7.3
18	7.7	14	e6.0	12	10	100	e27	e15	8.3	5.3	5.5	6.8
19	7.7	12	e6.0	12	14	60	e26	e8.0	8.5	5.4	5.9	6.8
20	7.9	12	e6.0	12	15	41	e25	e8.0	8.1	5.5	6.6	6.4
21	8.1	12	e6.0	12	11	46	e24	e8.0	8.4	5.2	18	7.2
22	7.6	12	e6.0	11	10	86	e23	8.2	8.4	5.6	5.0	6.9
23	8.1	11	e6.0	11	11	98	e23	7.7	8.4	5.8	4.7	7.0
24	8.0	12	e6.0	12	12	88	e23	7.7	9.0	5.7	4.8	6.1
25	8.8	12	e6.0	12	11	98	e24	7.1	8.4	6.1	6.2	6.2
26	7.7	13	e6.0	12	11	149	e24	6.8	8.3	6.0	5.9	6.5
27	6.8	11	e8.0	13	12	126	e26	6.9	8.3	5.4	20	6.7
28	7.3	11	12	13	13	71	23	6.9	8.7	5.8	10	6.9
29	7.5	11	11	13	---	58	21	7.2	8.4	6.0	6.6	6.6
30	9.6	10	11	13	---	78	19	7.7	7.8	5.7	7.5	6.4
31	85	---	9.7	12	---	108	---	8.2	---	5.6	5.7	---
TOTAL	304.0	373	229.5	344.8	309.6	1817	1476	341.4	250.6	189.6	255.2	202.6
MEAN	9.81	12.4	7.40	11.1	11.1	58.6	49.2	11.0	8.35	6.12	8.23	6.75
MAX	85	14	12	14	15	149	123	36	9.2	8.0	25	7.3
MIN	6.0	10	6.0	8.0	9.9	12	19	6.8	7.8	4.8	4.7	6.1
AC-FT	603	740	455	684	614	3600	2930	677	497	376	506	402

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1993, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	11.8	11.1	12.4	13.1	18.4	26.0	27.0	11.0	7.51	7.54	9.48	9.59		
MAX	25.7	15.2	21.7	16.8	45.1	72.4	132	27.6	12.1	13.8	16.5	17.3		
(WY)	1982	1988	1980	1983	1980	1983	1980	1980	1981	1981	1981	1986		
MIN	6.37	6.58	5.31	6.18	9.04	9.68	6.81	6.80	4.37	4.19	5.45	5.43		
(WY)	1989	1990	1990	1987	1992	1988	1990	1991	1986	1982	1992	1989		

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1980 - 1993

ANNUAL TOTAL	3124.6	6093.3	13.7
ANNUAL MEAN	8.54	16.7	28.4
HIGHEST ANNUAL MEAN			7.96
LOWEST ANNUAL MEAN			
HIGHEST DAILY MEAN	85	Oct 31	354
LOWEST DAILY MEAN	4.4	Jan 12	3.0
ANNUAL SEVEN-DAY MINIMUM	4.9	Aug 8	3.0
ANNUAL RUNOFF (AC-FT)	6200		9930
10 PERCENT EXCEEDS	13		20
50 PERCENT EXCEEDS	7.6		10
90 PERCENT EXCEEDS	5.6		5.9

e Estimated

## VIRGIN RIVER BASIN

149

09404450 EAST FORK VIRGIN RIVER NEAR GLENDALE, UT

LOCATION.--Lat 37°20'19", long 112°36'13", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ , sec. 14, T. 40 S., R. 7 W., Kane County, Hydrologic Unit 15010008, on right bank 50 ft downstream from Lydia's Creek, and 1.0 mi north of the town of Glendale on U.S. Highway 89.

DRAINAGE AREA.--74.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and artificial concrete control. Elevation of gage is 5,900 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. A few small diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 640 ft<sup>3</sup>/s, July 27, 1976, gage height, 4.14 ft; minimum daily discharge, 3.3 ft<sup>3</sup>/s, June 20, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 26	1900	156	2.14	May 17	0600	*226	*2.38
Apr. 12	0500	195	2.28				

Minimum daily discharge, 5.7 ft<sup>3</sup>/s, Oct. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	15	12	11	15	20	99	114	36	15	12	14
2	6.9	14	13	12	15	17	120	97	35	15	11	14
3	6.2	11	12	11	14	18	117	94	33	16	11	14
4	6.1	9.9	12	10	14	18	127	87	33	16	12	12
5	5.7	9.7	13	11	14	21	134	93	35	16	11	11
6	5.8	8.3	13	12	14	23	122	92	47	15	12	11
7	5.9	8.1	13	16	15	27	108	78	41	15	13	11
8	6.9	7.8	13	21	22	28	106	79	35	14	23	10
9	8.4	8.0	13	14	23	30	118	75	32	14	19	10
10	8.8	8.9	14	14	18	30	123	67	33	14	16	10
11	9.0	7.9	14	16	17	33	142	56	32	13	15	11
12	8.5	8.0	13	14	16	34	172	52	31	13	14	11
13	8.2	8.5	7.7	16	16	35	138	53	29	13	13	11
14	8.9	8.4	7.3	16	15	37	125	66	28	13	13	11
15	9.5	8.5	9.5	14	15	41	117	59	26	12	12	12
16	9.9	8.7	8.6	17	15	41	124	56	27	12	11	12
17	8.9	8.6	8.9	20	15	49	141	104	28	13	9.5	12
18	9.4	8.2	10	23	15	60	168	64	27	13	9.9	13
19	11	9.2	9.4	17	28	66	163	63	26	12	10	13
20	10	8.8	9.6	15	31	63	141	55	25	11	21	12
21	9.1	8.0	10	15	25	72	139	48	24	11	18	12
22	9.9	8.9	10	15	22	80	146	47	22	10	14	12
23	10.9	8.7	10	14	22	97	159	45	21	11	12	12
24	13	7.9	10	14	22	100	158	43	20	11	12	13
25	17	7.3	10	14	21	110	138	40	20	12	13	12
26	13	7.8	10	14	22	123	131	44	18	12	12	12
27	13	8.2	9.9	14	23	110	136	44	18	11	14	12
28	13	8.6	12	14	23	80	132	42	17	11	15	12
29	18	8.1	12	14	---	69	118	41	16	11	18	12
30	23	8.7	12	14	---	69	119	39	15	11	19	11
31	31	---	12	16	---	83	---	37	---	11	15	---
TOTAL	331.1	268.7	343.9	458	527	1684	3981	1974	830	397	430.4	355
MEAN	10.7	8.96	11.1	14.8	18.8	54.3	133	63.7	27.7	12.8	13.9	11.8
MAX	31	15	14	23	31	123	172	114	47	16	23	14
MIN	5.7	7.3	7.3	10	14	17	99	37	15	10	9.5	10
AC-FT	657	533	682	908	1050	3340	7900	3920	1650	787	854	704

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1993, BY WATER YEAR (WY)

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	13.8	15.5	16.7	16.9	19.2	25.0	41.6	32.9	16.2	12.3	12.1	11.5															
MAX	22.5	24.6	30.2	26.2	36.4	54.3	145	131	43.6	28.3	26.6	24.7															
(WY)	1984	1984	1967	1980	1980	1993	1980	1980	1980	1983	1983	1980															
VVMIN	6.60	8.38	9.58	9.40	9.90	11.5	8.93	6.38	5.16	5.55	5.72	5.10															
(WY)	1990	1990	1990	1991	1991	1977	1989	1989	1989	1991	1991	1989															

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1967 - 1993

ANNUAL TOTAL	4132.7	11580.1	
ANNUAL MEAN	11.3	31.7	
HIGHEST ANNUAL MEAN			19.5
LOWEST ANNUAL MEAN			46.2
HIGHEST DAILY MEAN	31	172	8.26
LOWEST DAILY MEAN	3.9	5.7	285
ANNUAL SEVEN-DAY MINIMUM	5.6	6.2	3.3
ANNUAL RUNOFF (AC-FT)	8200	22970	14090
10 PERCENT EXCEEDS	19	98	27
50 PERCENT EXCEEDS	9.8	14	15
90 PERCENT EXCEEDS	6.4	8.9	8.1

## VIRGIN RIVER BASIN

09404700 EAST FORK VIRGIN RIVER NEAR MOUNT CARMEL JUNCTION, UT

LOCATION.--Lat 37°12'30", long 112°41'16", in SE<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, sec. 25, T. 41 S., R. 8 W., Kane County, Hydrologic Unit 15010008, on left bank 1.0 mi south of Mount Carmel Junction, and 0.9 mi downstream of State Barn Wash.

DRAINAGE AREA.--179.3 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1992 to September 1993.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,140 above sea level, from topographic map.

REMARKS.--Records fair except those for Apr. 13 to May 3 and estimated daily discharges, which are poor. Many diversions for irrigation above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 18, 1992 reached a stage of 5.34 ft, present datum, from floodmarks, discharge, 550 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 401 ft<sup>3</sup>/s, Oct. 31 at 0200 hrs, gage height, 4.08 ft in gage well, 5.00 ft, from floodmarks, from rating curve extended above 150 ft<sup>3</sup>/s on basis of slope-area measurement; minimum daily discharge 4.7 ft<sup>3</sup>/s, July 22, Aug. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.0	23	e16	20	30	41	137	108	28	8.0	5.3	16
2	e3.0	21	e17	21	28	41	154	100	28	8.4	5.6	16
3	e2.0	17	e17	e19	26	41	149	98	26	7.9	5.5	15
4	e2.0	19	20	e16	26	41	157	96	26	9.0	6.3	14
5	e2.0	19	20	e19	25	48	157	97	29	8.6	5.8	12
6	e2.0	20	20	e22	24	58	139	87	46	8.0	6.1	11
7	e2.0	22	20	32	25	65	127	84	41	7.4	5.9	11
8	e2.0	22	21	76	79	70	127	74	34	6.3	21	11
9	e3.0	22	20	29	85	70	137	68	29	5.9	13	10
10	e4.0	24	19	24	40	75	142	61	27	5.8	8.9	9.9
11	e4.0	23	19	22	32	79	154	57	27	5.8	7.4	10
12	e3.0	23	20	20	29	64	172	56	25	5.6	6.5	10
13	e3.0	23	e19	23	26	57	145	73	24	5.3	5.3	11
14	e4.0	23	e18	26	25	61	134	77	22	5.4	5.2	13
15	e4.0	23	e18	25	24	79	126	61	21	5.4	5.4	14
16	e5.0	23	e18	35	24	84	129	82	21	5.1	5.2	15
17	e4.0	22	e18	42	24	92	143	98	22	5.2	4.7	16
18	e5.0	23	e18	44	25	137	160	81	23	5.5	4.8	16
19	e6.0	24	e17	33	105	111	154	73	20	5.7	4.9	14
20	e5.0	24	e17	28	100	101	138	56	19	5.1	43	12
21	e4.0	23	e17	28	52	108	139	50	18	4.9	26	11
22	e5.0	25	e18	27	44	115	144	46	16	4.7	9.3	10
23	e5.0	e21	e18	25	41	124	150	44	15	4.8	8.2	12
24	e7.0	e20	e18	24	46	126	142	43	15	4.8	6.1	12
25	e11	e18	e17	24	38	138	132	40	12	5.5	5.9	11
26	e9.0	e18	e17	25	36	161	127	39	12	5.4	6.8	12
27	e9.0	e18	e17	25	42	173	130	38	11	4.9	18	12
28	e9.0	e17	e19	25	45	138	126	36	9.9	4.8	18	12
29	13	e16	21	24	---	109	117	35	8.0	5.0	31	13
30	54	e16	22	30	---	104	116	32	8.0	5.3	36	14
31	93	---	21	34	---	116	---	29	---	5.3	20	---
TOTAL	287.0	632	577	867	1146	2827	4204	2019	662.9	184.8	361.1	375.9
MEAN	9.26	21.1	18.6	28.0	40.9	91.2	140	65.1	22.1	5.96	11.6	12.5
MAX	93	25	22	76	105	173	172	108	46	9.0	43	16
MIN	2.0	16	16	16	24	41	116	29	8.0	4.7	4.7	9.9
AC-FT	569	1250	1140	1720	2270	5610	8340	4000	1310	367	716	746

WTR YR 1993 TOTAL 14143.7 MEAN 38.7 MAX 173 MIN 2.0 AC-FT 28050

e Estimated

## VIRGIN RIVER BASIN

151

09404900 EAST FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat 37°09'51", long 112°57'28", in SE $\frac{1}{4}$ ,SW $\frac{1}{4}$ ,NW $\frac{1}{4}$ , sec. 2, T. 42 S., R. 10 W., Washington County, Hydrologic Unit 15010008, on right bank in Zion National Park, 1.2 mi upstream from Shunesburg, 0.7 mi upstream from Zion National Park boundary.

DRAINAGE AREA.--395 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,940 ft above sea level, from topographic map.

REMARKS.--Records good except those for flows above 200 ft<sup>3</sup>/s, which are fair, and for estimated daily discharges, which are poor. Numerous small diversions above the station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,940 ft<sup>3</sup>/s, Aug. 29, gage height, 9.70 ft, from rating curve extended above 200 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily discharge, 33 ft<sup>3</sup>/s, Sept. 7, 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	56	54	59	e120	e72	207	152	65	40	37	e43
2	40	54	55	61	e93	e74	233	143	65	41	37	e40
3	39	52	56	55	e80	79	221	139	63	41	37	e38
4	39	49	57	50	e71	79	228	138	61	42	37	e36
5	39	52	58	52	e70	86	232	141	64	43	38	e35
6	40	50	58	62	e70	100	212	131	97	42	37	e34
7	40	52	57	104	e70	113	197	127	83	44	39	e33
8	41	54	58	e180	e230	121	194	116	73	42	57	e33
9	41	54	58	e105	e240	126	206	110	67	41	62	e33
10	41	55	58	e98	e160	134	215	102	63	40	69	e34
11	43	54	58	e80	e100	139	226	96	63	40	44	e36
12	42	54	60	e65	e80	126	241	94	61	40	41	e37
13	42	54	58	e70	e70	106	209	99	60	39	39	e39
14	42	55	56	e160	e63	113	195	134	58	38	39	e42
15	43	55	56	e140	e60	133	184	107	55	38	38	e42
16	43	56	55	e190	e60	145	188	108	54	38	38	44
17	43	54	56	e225	e60	156	197	181	53	38	38	44
18	43	54	60	e220	e78	214	217	127	58	38	37	47
19	43	56	53	e150	e320	185	214	143	55	38	38	45
20	43	56	52	e130	e270	171	196	107	52	38	46	44
21	43	55	53	e125	e150	169	193	98	53	38	99	44
22	42	57	53	e130	e85	188	198	92	51	38	45	44
23	41	56	55	e115	e72	195	199	89	48	38	42	43
24	42	55	55	e80	e86	215	189	86	49	38	39	43
25	63	54	55	e80	e73	212	179	80	47	37	40	42
26	53	54	53	e80	e70	249	172	77	44	38	40	41
27	46	55	54	e82	e79	293	174	76	44	37	47	42
28	46	55	61	e82	e89	217	170	73	44	36	56	41
29	48	55	60	e80	---	183	160	73	41	36	e80	41
30	81	59	65	e120	---	168	161	69	40	36	e48	41
31	176	---	59	e180	---	179	---	66	---	36	e45	---
TOTAL	1508	1631	1756	3410	3069	4740	6007	3374	1731	1209	1429	1201
MEAN	48.6	54.4	56.6	110	110	153	200	109	57.7	39.0	46.1	40.0
MAX	176	59	65	225	320	293	241	181	97	44	99	47
MIN	39	49	52	50	60	72	160	66	40	36	37	33
AC-FT	2990	3240	3480	6760	6090	9400	11910	6690	3430	2400	2830	2380

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1993, BY WATER YEAR (WY)

	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
MEAN	43.7	51.7	55.1	83.4	85.3	110	129	76.9	49.0	39.4	44.1	42.7
MAX	48.6	54.4	56.6	110	110	153	200	109	57.7	39.8	46.1	45.4
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1992	1993	1992
MIN	38.8	49.1	53.6	56.8	61.8	67.5	58.6	45.0	40.3	39.0	42.2	40.0
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1992	1993	1992	1993

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1991 - 1993

ANNUAL TOTAL	18804	31065	67.5	1993
ANNUAL MEAN	51.4	85.1	85.1	1992
HIGHEST ANNUAL MEAN			49.9	1992
LOWEST ANNUAL MEAN				1993
HIGHEST DAILY MEAN	176	Oct 31	320	Feb 19 1993
LOWEST DAILY MEAN	36	Jun 11	33	Sep 7 1993
ANNUAL SEVEN-DAY MINIMUM	36	Jul 28	34	Sep 4 1993
ANNUAL RUNOFF (AC-FT)	37300	61620	48870	
10 PERCENT EXCEEDS	63	188	131	
50 PERCENT EXCEEDS	52	58	53	
90 PERCENT EXCEEDS	39	38	38	

e Estimated



## VIRGIN RIVER BASIN

09405200 DEEP CREEK NEAR CEDAR CITY, UT

LOCATION.--Lat 37°31'18", long 112°53'01", in NE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, sec. 7, T. 38 S, R. 9 W, Kane County, Hydrologic Unit 15010008, on left bank 100 ft downstream from lower Webster Flat road, 14.5 mi southeast of Cedar City.

DRAINAGE AREA.--6.72 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1987 to September 1993 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 7,680 ft above sea level, from topographic map.

REMARKS.--Records fair except those for flows less than 2.0 ft<sup>3</sup>/s, flows in excess of 40 ft<sup>3</sup>/s, and estimated daily discharges, which are poor. Some diversion for irrigation above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 79 ft<sup>3</sup>/s, May 16, 1993, gage height, 9.60 ft, from rating curve extended above 23 ft<sup>3</sup>/s; minimum daily discharge, 0.20 ft<sup>3</sup>/s Sept. 27, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 79 ft<sup>3</sup>/s at 1730 hrs, May 16, gage height, 9.60 ft, from rating curve extended above 23 ft<sup>3</sup>/s; minimum daily discharge, 0.59 ft<sup>3</sup>/s, Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	3.6	e1.3	e1.2	e1.4	1.8	7.2	35	14	4.0	2.1	3.1
2	.59	4.4	e1.3	e1.0	e1.2	1.8	8.0	31	13	3.9	2.1	3.0
3	.71	4.1	e1.3	e1.0	e1.2	1.8	8.4	36	13	3.8	2.1	2.9
4	.88	2.9	e1.3	e1.0	e1.2	1.8	9.3	34	12	3.8	2.2	2.8
5	.71	2.2	e1.3	e1.0	e1.2	2.0	9.2	25	12	3.6	2.2	2.8
6	.67	1.8	1.4	e1.0	e1.2	2.3	8.1	21	15	3.6	2.0	2.6
7	.67	2.0	1.4	e1.2	e1.6	2.6	7.7	24	12	3.5	2.2	2.7
8	.67	2.7	1.4	e1.2	e1.6	2.9	8.8	22	14	3.5	2.8	2.6
9	.67	1.7	1.4	e1.2	e1.5	3.1	10	20	11	3.4	2.7	2.5
10	.72	1.6	1.5	e1.2	e1.2	3.2	11	24	9.8	3.4	2.8	2.4
11	.74	2.8	1.5	e1.1	e1.2	3.2	12	28	8.8	3.3	2.3	2.1
12	.67	2.6	1.5	e1.1	e1.2	3.2	13	30	8.3	3.2	1.9	2.2
13	.67	1.6	1.6	e1.1	e1.2	3.0	11	34	7.8	3.2	1.8	2.3
14	.67	1.6	1.6	e1.2	e1.2	3.0	12	37	7.4	2.9	1.6	2.3
15	.67	1.8	1.5	e1.2	e1.4	3.0	12	36	7.2	2.8	1.5	2.3
16	.67	1.3	1.3	e1.4	e1.6	3.4	13	44	6.9	2.6	1.5	2.3
17	.68	1.3	1.3	e1.6	e1.8	4.0	17	43	6.8	2.2	1.6	2.3
18	.72	1.4	1.4	e1.6	1.9	5.6	18	36	6.8	2.2	1.5	2.4
19	.69	1.5	1.4	e1.2	2.0	6.3	17	32	6.3	2.4	1.8	2.1
20	.67	1.5	1.4	e1.2	2.1	6.3	18	32	5.9	2.4	2.7	2.1
21	.65	e1.5	1.4	e1.2	2.0	7.1	21	30	5.5	2.5	2.9	2.0
22	.83	e1.6	1.4	e1.2	1.9	8.0	23	27	5.1	2.8	2.3	1.9
23	.69	e1.7	1.4	e1.2	1.9	8.9	25	25	4.9	2.7	2.1	1.9
24	1.2	e1.6	1.4	e1.2	1.9	8.9	25	23	4.7	2.8	1.9	1.9
25	1.9	e1.3	1.3	e1.2	1.9	11	26	22	4.7	2.6	3.3	2.3
26	1.2	e1.3	1.3	e1.2	1.8	10	29	21	4.5	2.5	4.4	2.3
27	.92	e1.3	1.2	e1.2	1.8	8.2	31	19	4.4	2.4	3.9	2.0
28	1.4	e1.3	e1.2	e1.2	1.8	6.4	33	18	4.2	2.3	3.5	2.1
29	1.6	e1.3	e1.2	e1.2	---	5.3	35	16	4.2	2.2	3.3	2.3
30	3.4	e1.3	e1.2	---	---	5.4	37	16	4.1	2.2	3.8	2.1
31	5.4	---	e1.2	e1.5	---	6.1	---	15	---	2.1	3.5	---
TOTAL	32.94	58.6	42.3	37.3	43.9	149.6	515.7	856	244.3	90.8	76.3	70.6
MEAN	1.06	1.95	1.36	1.20	1.57	4.83	17.2	27.6	8.14	2.93	2.46	2.35
MAX	5.4	4.4	1.6	1.6	2.1	11	37	44	15	4.0	4.4	3.1
MIN	.59	1.3	1.2	1.0	1.2	1.8	7.2	15	4.1	2.1	1.5	1.9
AC-FT	65	116	84	74	87	297	1020	1700	485	180	151	140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1993, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993
MEAN	.97	1.54	1.25	1.15	1.54	2.82
MAX	1.66	2.78	1.75	1.62	1.83	4.83
(WY)	1988	1988	1989	1989	1991	1993
MIN	.51	.80	.57	.69	.84	1.34
(WY)	1991	1991	1991	1991	1990	1991

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1988 - 1993

ANNUAL TOTAL	705.51	2218.34	
ANNUAL MEAN	1.93	6.08	
HIGHEST ANNUAL MEAN			2.40
LOWEST ANNUAL MEAN			6.08
HIGHEST DAILY MEAN			1.01
LOWEST DAILY MEAN	10	44	44
ANNUAL SEVEN-DAY MINIMUM	.38	.59	.20
ANNUAL RUNOFF (AC-FT)	.40	.68	.23
10 PERCENT EXCEEDS	4.2	19	4.2
50 PERCENT EXCEEDS	1.3	2.3	1.4
90 PERCENT EXCEEDS	.60	1.2	.44

e Estimated

## VIRGIN RIVER BASIN

153

09405250 EAST FORK DEEP CREEK NEAR CEDAR CITY, UT

LOCATION.--Lat 37°30'35", long 112°52'58", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 18, T. 38 S., R. 9 W., Kane County, Hydrologic Unit 15010008, on right bank 400 ft downstream from road, 40 ft downstream from confluence of two streams, 15 mi southeast of Cedar City.

DRAINAGE AREA.--7.82 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1987 to September 1993 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 7,580 ft above sea level, from topographic map.

REMARKS.--Records fair except those for Nov. 8-23, Mar. 17 to Apr. 29, May 16, July 2-16, flows less than 2.0 ft<sup>3</sup>/s, and estimated daily discharges, which are poor. Some diversion for irrigation above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 86 ft<sup>3</sup>/s, Apr. 28, 1993, gage height, 8.82 ft, from rating curve extended above 35 ft<sup>3</sup>/s; no flow for part of July 7, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 86 ft<sup>3</sup>/s at 1900 hrs, Apr. 28, gage height 8.82 ft, from rating curve extended above 35 ft<sup>3</sup>/s; minimum daily discharge, 1.0 ft<sup>3</sup>/s, Oct. 6, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.1	e2.3	e2.0	e2.3	e2.3	26	44	20	5.2	2.6	3.7
2	1.2	3.1	e2.3	e1.8	e2.0	e2.3	30	41	20	4.8	2.6	3.4
3	1.1	2.7	e2.3	e1.8	e2.0	e2.3	31	45	19	4.8	2.5	2.7
4	1.1	2.4	e2.3	e1.8	e2.0	e2.3	32	42	18	4.8	2.7	2.6
5	1.1	e2.4	e2.3	e1.8	e2.0	e2.7	29	33	20	4.4	2.4	2.6
6	1.0	e2.4	e2.3	e1.8	e2.0	e3.2	25	30	25	4.2	2.4	2.6
7	1.0	e2.4	e2.3	e2.0	e2.8	e3.8	23	33	21	4.2	2.5	2.6
8	1.1	2.7	e2.3	e2.0	e2.8	e4.5	27	30	19	4.4	2.9	2.7
9	1.1	2.5	e2.3	e2.0	e2.6	e5.0	22	26	16	4.4	2.9	2.3
10	1.1	2.4	e2.3	e2.0	e2.0	e5.4	35	28	14	4.2	2.3	1.9
11	1.1	3.1	e2.3	e1.9	e2.0	e5.4	37	30	11	4.1	2.2	2.1
12	1.1	2.1	e2.3	e1.9	e2.0	e5.2	37	33	11	4.0	2.1	2.2
13	1.2	1.9	e2.5	e1.9	e2.0	e5.6	30	38	15	3.7	2.1	2.3
14	1.2	1.8	e2.5	e2.0	e2.0	e6.0	29	41	16	3.2	2.1	2.3
15	1.1	1.8	e2.3	e2.0	e2.2	e7.0	30	40	16	3.1	2.2	2.5
16	1.2	1.8	e2.1	e2.3	e2.3	e9.0	31	46	15	2.8	2.2	2.4
17	1.3	1.8	e2.1	e2.5	e2.4	13	37	42	16	2.7	2.3	2.1
18	1.3	1.7	e2.1	e2.5	e2.5	16	38	39	15	3.0	2.4	2.2
19	1.3	1.8	e2.3	e2.0	e2.6	18	33	36	12	3.0	2.7	2.1
20	1.2	1.8	e2.3	e2.0	e2.6	17	32	36	11	2.9	4.4	2.3
21	1.3	2.8	e2.3	e2.0	e2.5	20	37	35	8.9	3.0	3.3	2.2
22	1.6	1.8	e2.3	e2.0	e2.0	22	41	34	9.0	3.1	2.9	2.2
23	1.6	2.0	e2.3	e2.0	e2.3	24	45	33	8.5	3.0	2.8	2.1
24	2.2	e2.3	e2.3	e2.0	e2.3	25	45	32	8.5	3.3	2.8	2.0
25	2.4	e2.3	e2.1	e2.0	e2.3	28	47	30	7.4	3.2	8.2	2.1
26	1.9	e2.3	e2.1	e2.0	e2.3	28	53	30	7.1	2.8	4.4	2.0
27	1.9	e2.3	e2.0	e2.0	e2.3	25	53	30	6.4	2.9	3.9	2.0
28	2.4	e2.3	e2.0	e2.0	e2.3	e20	50	27	5.9	2.7	3.4	2.1
29	3.2	e2.3	e2.0	e2.0	---	e20	48	24	5.9	2.8	4.2	2.0
30	4.6	e2.3	e2.0	e2.3	---	21	44	21	5.7	2.7	4.2	2.0
31	4.1	---	e2.0	e2.5	---	22	---	20	---	2.6	3.6	---
TOTAL	50.1	68.4	69.2	62.8	63.8	391.0	1087	1049	403.3	110.0	94.2	70.3
MEAN	1.62	2.28	2.23	2.03	2.28	12.6	36.2	33.8	13.4	3.55	3.04	2.34
MAX	4.6	3.1	2.5	2.5	2.8	28	53	46	25	5.2	8.2	3.7
MIN	1.0	1.7	2.0	1.8	2.0	2.3	23	20	5.7	2.6	2.1	1.9
AC-FT	99	136	137	125	127	776	2160	2080	800	218	187	139

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1993, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993
MEAN	1.67	3.00	2.31	2.16	2.52	12.3	10.1
MAX	2.87	6.59	3.86	3.45	3.95	12.6	36.2
(WY)	1988	1988	1988	1988	1988	1993	1993
MIN	.97	1.65	1.63	1.41	1.76	2.08	3.57
(WY)	1991	1991	1991	1991	1990	1990	1990

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1987 - 1993

ANNUAL TOTAL	1064.31	3519.1	
ANNUAL MEAN	2.91	9.64	
HIGHEST ANNUAL MEAN			3.97
LOWEST ANNUAL MEAN			9.64
HIGHEST DAILY MEAN	19	53	1.60
LOWEST DAILY MEAN	.73	1.0	.14
ANNUAL SEVEN-DAY MINIMUM	.78	1.1	.25
ANNUAL RUNOFF (AC-FT)	2110	6980	2870
10 PERCENT EXCEEDS	5.7	32	6.8
50 PERCENT EXCEEDS	2.0	2.6	2.2
90 PERCENT EXCEEDS	.96	1.9	.70

e Estimated

## VIRGIN RIVER BASIN

09405490 NORTH FORK VIRGIN RIVER ABOVE BIG BEND NEAR SPRINGDALE, UT

LOCATION.--Lat 37°16'43", long 112°56'38", in NW¼NE¼, sec. 3, T. 41 S., R. 10 W., Washington County, Hydrologic Unit 15010008, on left bank in Zion National Park, 0.4 mi upstream from Big Bend, 8.0 mi north of Springdale.

DRAINAGE AREA.--311 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,400 ft above sea level, from topographic map.

REMARKS.--Records good except those for flows above 600 ft<sup>3</sup>/s, which are fair, and for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, same as current year; minimum discharge, 30 ft<sup>3</sup>/s, Dec. 1, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,310 ft<sup>3</sup>/s at 2200 hrs, May 3, gage height, 8.37 ft, from rating curve extended above 1,200 ft<sup>3</sup>/s; minimum daily discharge, 31 ft<sup>3</sup>/s, Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	61	38	47	54	62	e395	1190	380	115	e54	60
2	38	56	43	49	50	62	454	1110	349	114	e54	58
3	38	56	41	40	49	63	430	1260	320	112	e54	56
4	38	51	44	39	49	64	471	1380	294	115	e55	55
5	38	51	47	42	48	69	471	909	296	114	e54	55
6	38	49	43	48	47	79	387	821	389	113	e53	55
7	38	49	46	71	49	87	348	977	320	114	e53	55
8	38	48	46	129	96	93	377	922	298	114	e58	54
9	37	48	46	64	93	99	440	771	262	112	e65	56
10	37	48	45	56	74	107	476	900	233	109	e70	56
11	37	44	45	51	60	121	541	1050	213	107	e59	58
12	38	47	47	36	56	113	559	1140	200	e105	e57	64
13	38	47	40	49	53	96	428	1290	188	e105	e56	64
14	38	47	31	68	51	106	427	1330	177	e105	e56	63
15	36	46	38	63	49	127	452	1190	167	e100	e56	68
16	36	46	37	76	49	154	528	1230	156	e89	e56	71
17	37	45	35	83	49	166	653	1280	153	e69	e56	75
18	37	45	45	78	51	260	725	1090	156	e63	e56	56
19	37	46	38	65	190	250	628	985	141	e61	60	52
20	37	46	32	54	137	230	632	982	134	e60	68	52
21	36	40	36	54	80	254	751	965	128	e59	82	52
22	37	49	38	53	68	292	864	887	123	e59	66	51
23	36	44	41	50	66	326	940	820	118	e59	63	51
24	36	40	43	46	68	364	887	761	113	e58	61	51
25	42	33	42	47	61	445	892	728	109	e58	71	51
26	39	34	40	49	57	521	961	698	104	e57	65	51
27	38	38	42	50	67	485	1040	645	99	e57	92	51
28	40	42	46	49	68	327	1090	568	97	e55	63	51
29	51	41	48	49	---	265	1050	506	119	e54	61	52
30	82	37	54	55	---	262	1230	445	118	e55	91	52
31	142	---	46	60	---	298	---	409	---	e54	62	---
TOTAL	1327	1374	1303	1770	1889	6247	19527	29239	5954	2621	1927	1696
MEAN	42.8	45.8	42.0	57.1	67.5	202	651	943	198	84.5	62.2	56.5
MAX	142	61	54	129	190	521	1230	1380	389	115	92	75
MIN	36	33	31	36	47	62	348	409	97	54	53	51
AC-FT	2630	2730	2580	3510	3750	12390	38730	58000	11810	5200	3820	3360

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993
MEAN	40.2	43.4	41.2	48.3	57.4	135	444	548	129	64.2	58.0	48.3
MAX	42.8	45.8	42.0	57.1	67.5	202	651	943	198	84.5	62.2	56.5
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993
MIN	37.5	41.0	40.3	39.6	47.8	67.5	237	152	59.8	43.8	53.8	40.0
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1992 - 1993

ANNUAL TOTAL	26550	74874										
ANNUAL MEAN	72.5	205										
HIGHEST ANNUAL MEAN												1993
LOWEST ANNUAL MEAN												1992
HIGHEST DAILY MEAN	329	Apr 29	1380	May 4								1993
LOWEST DAILY MEAN	31	Dec 14	31	Dec 14								1991
ANNUAL SEVEN-DAY MINIMUM	37	Oct 15	37	Oct 15								1991
ANNUAL RUNOFF (AC-FT)	52660	148500										
10 PERCENT EXCEEDS	167	709										
50 PERCENT EXCEEDS	46	61										
90 PERCENT EXCEEDS	38	38										

e Estimated

## VIRGIN RIVER BASIN

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## 09405500 NORTH FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat 37°12'35", long 112°58'40", in NW1/4, SW1/4, NW1/4, sec. 22, T. 41 S., R. 10 W., Washington County, Hydrologic Unit 15010008, on right bank in Zion National Park, 0.2 mi downstream from point of diversion of Springdale Canal, 0.5 mi downstream from Pine Creek, and 1.9 mi northeast of Springdale.

DRAINAGE AREA.--344 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1913 to June 1914, June to November 1923, April to June, August and September 1925 (fragmentary), October 1925 to current year. Published as Zion Creek near Springdale 1913-14 (flow of Springdale Canal not included) and as Mukuntuweap River near Springdale 1923, 1925-32. Flow of Springdale canal not included after September 30, 1988.

GAGE.--Water-stage recorder. Elevation of gage is 3,970 ft above sea level, from topographic map. May 13, 1913, to June 30, 1914, nonrecording gage at site 3.2 mi downstream at different datum. June 6, 1923, to Dec. 14, 1949, nonrecording gages at several sites within 0.8 mi of present site at various datums.

REMARKS.--Records good except those for days when flow exceeds 80 ft<sup>3</sup>/s, which are fair, and those for estimated daily discharges, which are poor. Approximately 3,200 acre-feet of flow are diverted into Springdale Canal and another diversion for irrigation of about 1,400 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,150 ft<sup>3</sup>/s, Dec. 6, 1966, gage height, 12.98 ft, from rating curve extended above 2,000 ft<sup>3</sup>/s on basis of drift measurement at gage height 6.7 ft, and a slope-area measurement at gage height 10.25 ft; minimum observed, 20 ft<sup>3</sup>/s, July 31, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,700 ft<sup>3</sup>/s at 2300 hrs, May 3, gage height, 5.40 ft; minimum daily discharge, 36 ft<sup>3</sup>/s, Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	74	41	55	76	82	459	1060	371	124	54	63
2	40	61	48	60	62	81	499	966	341	122	55	59
3	41	60	48	52	57	81	474	1040	316	120	55	56
4	41	55	49	48	57	83	498	1140	290	116	57	54
5	39	57	54	48	54	89	503	741	285	122	55	54
6	38	56	51	57	54	102	442	674	389	121	54	51
7	36	56	52	176	54	116	396	753	317	117	54	51
8	37	57	53	342	229	127	417	755	294	115	61	48
9	37	55	52	80	188	135	479	629	266	115	70	50
10	39	54	52	69	112	148	519	737	236	113	77	54
11	38	50	52	64	79	167	571	878	220	114	64	55
12	40	53	56	42	70	155	614	958	208	112	56	64
13	41	54	47	51	64	131	487	1090	203	111	54	68
14	40	54	41	138	60	144	471	1120	192	114	52	64
15	39	53	44	102	57	175	486	1040	181	108	51	68
16	40	52	43	189	57	209	539	1050	171	104	50	72
17	40	51	40	184	55	241	629	1120	167	73	50	76
18	40	51	51	141	59	363	709	968	172	67	49	60
19	41	51	48	95	372	335	642	857	158	64	50	54
20	40	52	38	70	257	310	624	850	150	63	57	49
21	38	45	43	67	118	325	695	853	146	61	82	49
22	39	55	44	65	92	364	767	798	137	61	61	48
23	40	49	46	59	85	395	829	732	131	61	56	46
24	41	44	49	51	102	439	e831	694	125	61	53	46
25	51	38	51	53	80	504	e843	661	122	61	63	46
26	44	39	47	56	75	614	e898	641	115	58	63	46
27	41	43	47	56	96	691	945	591	107	60	93	47
28	43	48	59	55	102	443	982	530	104	57	71	48
29	63	48	55	57	---	---	969	469	125	55	124	47
30	199	44	68	83	---	356	1100	422	126	56	102	48
31	235	---	57	98	---	388	---	393	---	55	67	---
TOTAL	1618	1559	1526	2763	2823	8145	19317	25210	6165	2761	1960	1641
MEAN	52.2	52.0	49.2	89.1	101	263	644	813	205	89.1	63.2	54.7
MAX	235	74	68	342	372	691	1100	1140	389	124	124	76
MIN	36	38	38	42	54	81	396	393	104	55	49	46
AC-FT	3210	3090	3030	5480	5600	16160	38320	50000	12230	5480	3890	3250

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1993, BY WATER YEAR (WY)

	MEAN	54.6	56.0	55.5	63.3	82.2	250	360	137	67.1	63.4	57.1
MAX	89.1	94.8	119	196	501	1063	644	1081	690	137	130	151
(WY)	1984	1988	1972	1980	1980	1993	1993	1983	1983	1983	1983	1980
MIN	33.2	35.9	36.6	39.0	42.3	43.8	51.8	49.8	36.5	35.1	33.3	24.8
(WY)	1978	1990	1990	1991	1977	1977	1977	1977	1990	1972	1976	1989

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1969 - 1993

ANNUAL TOTAL	28964	75488	113	1983
ANNUAL MEAN	79.1	207	250	1977
HIGHEST ANNUAL MEAN			41.8	1980
LOWEST ANNUAL MEAN			3000	1977
HIGHEST DAILY MEAN	324	Apr 18	1140	May 4
LOWEST DAILY MEAN	33	Jan 2	36	Oct 7
ANNUAL SEVEN-DAY MINIMUM	36	Sep 24	38	Oct 5
ANNUAL RUNOFF (AC-FT)	57450	149700	81740	24
10 PERCENT EXCEEDS	194	650	215	59
50 PERCENT EXCEEDS	52	68	59	38
90 PERCENT EXCEEDS	38	44	38	

e Estimated

## VIRGIN RIVER BASIN

09405900 NORTH CREEK NEAR VIRGIN, UT

LOCATION.--Lat 37°14'14", long 113°09'01", in SE<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, sec. 12, T. 41 S., R. 13 W., Washington County, Hydrologic Unit 15010008, on left downstream wingwall of Bonnie Reeder Memorial Bridge, 3.2 mi north of town of Virgin and State Highway 9.

DRAINAGE AREA.--110 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1984 to September 1993 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,680 ft above sea level, from topographic map. Prior to February 7, 1992, at site 50 ft upstream at same datum.

REMARKS.--Records good except those for flows greater than 200 ft<sup>3</sup>/s, flows less than 2.0 ft<sup>3</sup>/s, and estimated daily discharges, which are poor. Two diversions for irrigation above station, the nearest approximately 200 ft upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft<sup>3</sup>/s, Aug. 23, 1992, gage height, 12.50 ft, from contracted-opening measurement; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft<sup>3</sup>/s, Oct. 31, gage height, 8.55 ft, from rating curve extended above 320 ft<sup>3</sup>/s on basis of contracted-opening measurement at gage height 12.50 ft; minimum daily discharge, 0.17 ft<sup>3</sup>/s, Aug. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	e4.0	5.3	5.2	48	53	71	92	7.6	2.1	.69	1.3
2	.48	e3.0	4.9	7.2	33	48	72	85	6.1	2.7	.78	1.3
3	1.0	e2.8	4.6	5.1	24	52	64	82	6.5	2.9	.74	1.4
4	1.5	e2.7	4.6	3.9	22	54	65	101	6.0	2.9	.61	1.0
5	1.2	e2.6	4.4	3.9	20	60	67	53	7.2	2.9	.40	1.0
6	1.3	2.5	4.3	5.9	16	65	61	41	65	2.2	.38	1.0
7	1.2	2.4	4.0	114	18	66	50	44	9.3	.70	1.8	1.1
8	1.0	2.4	4.0	366	407	67	53	57	6.6	1.2	1.8	.68
9	.54	2.3	3.9	34	352	65	60	44	4.9	1.8	2.2	.51
10	.66	2.1	3.7	62	132	70	66	52	5.5	2.0	3.0	.74
11	1.2	1.8	3.6	42	76	71	74	62	5.8	2.2	.48	.88
12	1.1	1.9	4.0	9.4	57	49	76	68	8.4	2.7	.73	1.3
13	1.4	1.9	3.3	23	45	41	57	83	7.6	1.5	.76	1.4
14	1.6	2.1	2.9	220	39	46	53	65	7.4	.53	1.2	1.2
15	1.3	2.6	3.2	95	31	60	70	57	6.6	1.1	.93	.28
16	.77	3.0	3.0	249	29	67	57	63	5.8	.97	1.1	1.0
17	1.6	2.9	3.2	290	26	75	79	50	6.5	1.7	.39	1.2
18	1.6	3.0	3.7	276	27	126	90	36	6.0	1.3	.17	1.8
19	1.8	3.0	e3.0	97	561	78	81	28	5.6	1.9	.44	1.6
20	1.7	3.7	e3.0	47	384	65	73	25	5.3	1.1	6.0	1.5
21	1.7	3.9	e3.0	40	125	70	77	19	5.1	.22	3.7	1.7
22	2.0	4.3	e3.0	39	84	75	84	17	4.3	.78	1.5	1.1
23	1.7	4.6	e3.0	28	71	77	92	14	2.5	1.4	1.4	.74
24	2.5	4.8	4.0	22	105	91	88	12	3.2	.69	1.1	1.2
25	3.6	5.6	3.8	20	64	108	85	11	2.9	.81	.62	1.8
26	2.2	5.6	3.8	21	51	122	91	9.6	3.1	1.1	.97	1.5
27	2.1	5.4	3.6	23	68	212	95	8.8	3.2	1.6	24	1.4
28	2.6	5.2	24	22	77	151	101	8.3	3.8	.26	5.2	1.1
29	9.4	5.2	7.3	21	---	92	100	8.7	3.5	.60	4.8	.38
30	121	5.1	18	29	---	68	97	7.9	1.5	.99	8.9	1.2
31	e150	---	5.8	52	---	63	---	8.1	---	1.1	2.5	---
TOTAL	322.68	102.4	155.9	2272.6	2992	2407	2249	1312.4	222.8	45.95	79.29	34.31
MEAN	10.4	3.41	5.03	73.3	107	77.6	75.0	42.3	7.43	1.48	2.56	1.14
MAX	150	5.6	24	366	561	212	101	101	65	2.9	24	1.8
MIN	.48	1.8	2.9	3.9	16	41	50	7.9	1.5	.22	.17	.28
AC-FT	640	203	309	4510	5930	4770	4460	2600	442	91	157	68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1993, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	4.42	6.97	4.68	13.2	23.0	29.1	23.3	9.05
MAX	10.4	22.0	9.55	73.3	107	77.6	75.0	42.3
(WY)	1993	1988	1986	1993	1993	1993	1993	1993
MIN	1.38	2.09	3.02	3.27	4.21	4.26	4.84	1.78
(WY)	1989	1989	1991	1991	1991	1990	1986	1989

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1986 - 1993

ANNUAL TOTAL	4057.87	12196.33	10.1
ANNUAL MEAN	11.1	33.4	33.4
HIGHEST ANNUAL MEAN			3.00
LOWEST ANNUAL MEAN			561
HIGHEST DAILY MEAN	242	Mar 3	561
LOWEST DAILY MEAN	.00	Jul 30	.17
ANNUAL SEVEN-DAY MINIMUM	.04	Jul 17	.67
ANNUAL RUNOFF (AC-FT)	8050	24190	7310
10 PERCENT EXCEEDS	27	84	23
50 PERCENT EXCEEDS	3.0	5.2	3.1
90 PERCENT EXCEEDS	.15	.98	.17

e Estimated

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LOCATION.--Lat 37°12'15", long 113°10'48", in SW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 23, T. 41 S., R. 12 W., Washington County, Hydrologic Unit 15010008, on right bank 0.5 mi east of Virgin and .25 mi downstream from North Creek.

PERIOD OF RECORD.--April 1909 to September 1971, October 1978 to current year. Fragmentary prior to 1926, monthly discharge published in WSP 1313.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,500 ft above sea level, from topographic map. At present location since July 18, 1985; from Oct. 1, 1978, to July 5, 1985, located 2 mi downstream on left bank, and from Dec. 19, 1949, to September 1971, located directly across from previous site, on right bank at different datum. Prior to Dec. 19, 1949, nonrecording gages at several sites within 3 mi of present site at various datums.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,800 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 18.00 ft, site and datum then in use; from rating curve extended above 5,000 ft<sup>3</sup>/s on basis of one slope-area measurement and one float measurement; minimum observed, 22 ft<sup>3</sup>/s July 10, 1920 and June 11, 1921.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct. 31	0100	a 2,990	12.71	Mar. 27	0700	a 1,990	11.72
Jan. 8	0330	a 2,770	12.51	May 4	0200	a 2,450	12.21
Feb. 8	2200	a 2,690	12.44	May 15	0100	a 2,340	12.10
Feb. 20	0230	a *4,310	*13.74	Aug. 29	2300	a 3,410	13.06

Minimum daily discharge, 67 ft<sup>3</sup>/s Oct. 1.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	167	109	138	314	301	719	1590	454	149	85	95
2	69	143	115	153	231	274	858	1420	422	148	86	88
3	69	134	116	143	209	283	772	1400	395	151	83	84
4	69	127	116	124	200	278	791	1800	361	142	87	82
5	69	127	121	126	192	291	824	1060	357	149	86	81
6	70	122	120	148	185	316	729	889	573	150	82	78
7	69	123	117	351	188	341	621	948	419	148	85	78
8	69	122	123	1330	1150	353	627	1060	354	146	97	76
9	73	119	123	270	1240	356	737	785	311	144	114	77
10	72	119	122	274	508	369	831	916	285	138	139	76
11	73	118	123	259	338	398	902	1130	267	137	101	75
12	73	116	138	168	288	379	1080	1280	250	135	92	80
13	77	119	127	176	253	311	773	1540	240	134	87	85
14	74	119	114	470	235	322	715	1660	230	132	81	87
15	72	119	112	375	215	378	724	1660	216	127	80	88
16	73	119	115	652	205	439	769	1530	208	123	80	95
17	79	116	109	714	197	490	922	1760	201	107	83	100
18	79	117	125	707	197	769	1080	1580	210	95	88	95
19	82	119	117	367	1420	694	964	1290	195	94	86	85
20	83	120	107	264	1960	597	876	1190	185	97	95	81
21	80	114	113	232	510	565	951	1160	179	92	182	81
22	83	118	114	240	381	669	1090	1070	171	91	107	81
23	85	118	120	212	351	683	1230	947	163	91	98	76
24	95	113	124	184	461	820	1210	880	155	89	93	75
25	119	110	123	182	335	901	1150	822	153	90	89	77
26	109	105	121	181	298	1160	1340	795	145	88	103	76
27	99	108	121	185	328	1620	1400	748	137	89	141	76
28	105	113	192	183	378	935	1590	671	133	90	134	78
29	130	115	146	172	---	647	1550	576	146	85	259	74
30	430	113	189	222	---	554	1600	522	151	86	244	77
31	907	---	145	381	---	587	---	485	---	85	110	---
TOTAL	3703	3612	3877	9583	12767	17080	29425	35164	7666	3622	3377	2457
MEAN	119	120	125	309	456	551	981	1134	256	117	109	81.9
MAX	907	167	192	1330	1960	1620	1600	1800	573	151	259	100
MIN	67	105	107	124	185	274	621	485	133	85	80	74
AC-FT	7340	7160	7690	19010	25320	33880	58360	69750	15210	7180	6700	4870

MEAN	103	138	150	147	184	223	366	402	152	104	126	111
MAX	185	234	648	461	833	551	981	1582	762	207	255	289
(WY)	1984	1966	1967	1969	1980	1993	1993	1979	1983	1980	1983	1958
MIN	66.7	88.1	98.5	110	108	117	121	87.5	58.1	50.1	55.3	53.1
(WY)	1957	1957	1957	1965	1961	1963	1970	1959	1961	1960	1960	1956

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR		FOR 1993 WATER YEAR		WATER YEARS 1951-71, 1979-93	
ANNUAL TOTAL	51935		132333			
ANNUAL MEAN	142		363		184	
HIGHEST ANNUAL MEAN					390	1980
LOWEST ANNUAL MEAN					95.7	1990
HIGHEST DAILY MEAN	907	Oct 31	1960	Feb 20	9670	Dec 6 1966
LOWEST DAILY MEAN	60	Aug 19	67	Oct 1	40	Aug 14 1963
ANNUAL SEVEN-DAY MINIMUM	64	Jul 19	69	Oct 1	44	Jul 17 1961
ANNUAL RUNOFF (AC-FT)	103000		262500		133100	
10 PERCENT EXCEEDS	289		1000		329	
50 PERCENT EXCEEDS	116		149		121	
90 PERCENT EXCEEDS	68		81		71	



## VIRGIN RIVER BASIN

09408000 LEEDS CREEK NEAR LEEDS, UT

LOCATION.--Lat 37°16'03", long 113°22'12", in SW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, sec. 36, T. 40 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on left bank 1,150 ft upstream from Leeds Ditch diversion, 2.1 mi north of Leeds, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--15.5 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1915 to June 1920 (fragmentary) in reports of Geological Survey; October 1964 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,000 ft above sea level, from topographic map. Prior to June 1920, at various sites and datums about 600 ft downstream; Oct. 28, 1964, to Aug. 20, 1967, water-stage recorder at site 1,000 ft downstream at different datum.

REMARKS.--Records good except those for flows in excess of 100 ft<sup>3</sup>/s and estimated daily discharges, which are poor. One diversion above station for domestic use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft<sup>3</sup>/s Aug. 3, 1988, gage height, 9.41 ft, from rating curve extended above 29 ft<sup>3</sup>/s on basis of slope-area measurement; minimum daily discharge, 1.1 ft<sup>3</sup>/s Sept. 17, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 12, 1964, reached a stage of 6.00 ft, former site and datum, discharge 2,980 ft<sup>3</sup>/s from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 14	1000	a 52	2.94	Feb. 19	2000	a 149	3.55
Jan. 18	0030	a 126	3.43	Mar. 27	0130	a 68	3.07
Feb. 8	1500	a *358	*4.43				

a from rating curve extended above 50 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 9.41 ft.

Minimum daily discharge, 3.3 ft<sup>3</sup>/s, Dec.19-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	4.5	3.8	3.8	6.4	9.7	35	32	33	27	17	9.7
2	4.1	4.3	3.8	3.9	5.9	9.7	34	31	33	27	17	9.5
3	4.0	4.2	3.8	4.2	5.7	10	34	30	34	26	16	9.3
4	4.0	4.2	3.8	7.5	5.7	11	33	30	34	25	16	9.0
5	4.0	4.2	4.0	4.3	5.7	14	33	29	35	25	16	8.9
6	3.9	4.2	3.8	4.1	5.6	19	33	29	36	24	15	8.7
7	3.9	4.2	3.8	5.8	5.7	22	32	28	35	23	15	8.6
8	3.9	4.1	4.0	20	118	26	31	27	35	23	15	8.4
9	3.9	4.1	3.8	6.0	62	26	31	26	35	26	15	8.3
10	3.9	4.1	3.8	6.2	22	29	32	25	34	29	15	8.1
11	3.8	4.0	3.8	5.8	14	30	33	25	33	28	14	8.0
12	3.8	4.0	3.8	4.6	12	23	33	26	33	28	14	7.9
13	3.8	4.0	3.8	4.9	9.8	20	33	27	32	27	14	7.8
14	3.7	4.0	3.8	31	8.9	20	32	27	32	26	13	7.8
15	3.7	4.0	3.8	12	8.2	24	31	27	31	26	13	7.8
16	3.7	3.9	e3.5	42	7.7	28	31	28	31	25	13	7.7
17	3.8	3.9	e3.5	60	7.2	32	31	28	31	25	13	7.6
18	3.7	3.9	e3.4	58	7.6	40	31	28	31	24	12	7.6
19	3.7	3.9	e3.3	14	63	34	31	28	31	23	12	7.5
20	3.7	3.9	e3.3	8.9	39	30	31	28	30	23	12	7.4
21	3.8	3.9	e3.3	7.5	15	33	31	28	30	22	12	7.2
22	3.8	3.8	e3.3	7.4	12	34	32	28	30	22	11	7.2
23	3.8	3.8	e3.5	6.5	11	37	32	28	30	21	11	7.0
24	4.1	3.8	e3.6	5.8	13	39	32	29	29	20	11	7.0
25	4.1	3.9	3.6	5.6	11	38	32	29	29	20	11	6.9
26	4.0	3.8	3.5	5.6	10	40	32	30	29	19	11	6.9
27	4.0	3.8	3.7	5.9	11	53	32	30	29	19	11	6.8
28	4.2	3.8	4.9	6.1	10	48	32	31	28	19	11	6.7
29	4.6	3.8	4.2	5.9	---	37	32	31	28	18	10	6.6
30	8.8	3.8	4.7	6.3	---	33	32	32	28	18	10	6.5
31	9.1	---	3.8	7.2	---	33	---	33	---	17	10	---
TOTAL	131.5	119.8	116.5	376.8	513.1	882.4	964	888	949	725	406	234.4
MEAN	4.24	3.99	3.76	12.2	18.3	28.5	32.1	28.6	31.6	23.4	13.1	7.81
MAX	9.1	4.5	4.9	60	118	53	35	33	36	29	17	9.7
MIN	3.7	3.8	3.3	3.8	5.6	9.7	31	25	28	17	10	6.5
AC-FT	261	238	231	747	1020	1750	1910	1760	1880	1440	805	465

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1993, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	3.88	4.02	4.71	4.58	6.79	9.38	9.88	11.0	13.8	10.8	7.32	4.71																	
MAX	9.16	10.7	26.6	12.2	52.0	36.3	33.1	28.7	38.1	34.3	21.6	12.5																	
(WY)	1984	1988	1967	1993	1980	1983	1969	1973	1983	1983	1988	1983																	
MIN	2.05	1.85	2.01	2.18	2.32	2.46	2.00	2.30	2.15	1.51	1.62	1.73																	
(WY)	1971	1978	1978	1991	1991	1977	1977	1977	1977	1977	1977	1972																	

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1965 - 1993

ANNUAL TOTAL	2915.7	6306.5	
ANNUAL MEAN	7.97	17.3	
HIGHEST ANNUAL MEAN			7.58
LOWEST ANNUAL MEAN			18.1
HIGHEST DAILY MEAN	39	118	412
LOWEST DAILY MEAN	2.7	3.3	1.1
ANNUAL SEVEN-DAY MINIMUM	2.9	3.4	1.3
ANNUAL RUNOFF (AC-FT)	5780	12510	5490
10 PERCENT EXCEEDS	15	33	17
50 PERCENT EXCEEDS	5.6	12	4.6
90 PERCENT EXCEEDS	3.3	3.8	2.4

e Estimated

## VIRGIN RIVER BASIN

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09408135 VIRGIN RIVER ABOVE QUAIL CREEK NEAR HURRICANE, UT

LOCATION.--Lat 37°10'45", long 113°22'27", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 36, T. 41 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on left bank 2.2 mi upstream from Highway 9 bridge, 0.5 mi upstream from Quail Creek, and 3.8 mi west of Hurricane.

DRAINAGE AREA.--1,381 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1989 to September 1990, April 1992 to September 1993 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,800 ft above sea level, from topographic map. From Feb. 15, 1989 to Sept. 30, 1990 at site about 1 mi upstream at different datum, this published gage location paragraph contains several errors.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,540 ft<sup>3</sup>/s, Feb. 20, 1993, gage height, 9.60 ft, from rating curve extended above 2,800 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 9.06 ft; minimum daily discharge, 20 ft<sup>3</sup>/s July 25-27, 1990.

EXTREMES FOR CURRENT YEAR RECORD.--Maximum discharge, 4,540 ft<sup>3</sup>/s at 0530 hrs, Feb. 20, gage height, 9.60 ft from rating curve extended as explained above; minimum daily discharge, 44 ft<sup>3</sup>/s, Dec. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	e211	e44	e115	e360	e330	e940	e1700	409	78	e60	140
2	67	e170	e49	e115	e270	e320	e1000	e1530	376	77	e65	105
3	71	e161	e50	e125	e230	e360	e1020	e1420	341	74	e70	103
4	65	e157	e54	e110	e200	e400	e1030	e1950	310	e76	e80	95
5	76	e157	e60	e110	e200	e450	e1050	e1300	296	76	88	104
6	70	e114	e68	e120	e180	e520	e920	e1050	539	79	75	109
7	65	e168	e70	e140	e180	e580	e820	e1050	408	76	71	103
8	64	e152	e80	e1950	e1600	e600	e780	e1100	340	73	81	95
9	66	e156	e76	e360	e2650	e620	e860	e940	295	72	111	92
10	62	e140	e73	e210	e1080	e620	e900	e1020	252	168	141	97
11	76	e152	e75	e380	e600	e660	e980	e1200	222	102	116	102
12	e70	e140	e90	e120	e480	e670	e1150	e1250	197	108	97	108
13	59	e103	e93	e100	e400	e520	e940	e1350	179	e90	86	117
14	58	e103	e88	e700	e350	e510	e880	e1500	164	77	82	125
15	58	e88	e80	e500	e300	e560	e860	e1550	e150	63	82	121
16	61	e94	e83	e760	e270	e680	e880	e1420	133	e65	83	123
17	84	e90	e90	e1050	e250	e730	e950	e1580	124	e85	83	123
18	89	e62	e95	e1400	e250	e990	e1080	e1480	126	e90	75	119
19	93	e60	e95	e610	e1600	e1020	e1120	e1180	112	e80	79	108
20	93	e58	e95	e370	e3100	e880	e1050	e1100	99	e75	84	108
21	87	e59	e90	e171	e1250	e820	e1100	e1000	91	e70	174	112
22	84	e60	e90	e176	e790	e900	e1200	965	92	e68	120	111
23	75	e60	e90	e157	e680	e860	e1340	858	83	e80	92	109
24	82	e57	e90	e120	e620	e980	e1340	793	78	e70	83	111
25	116	e54	e90	e103	e490	e1100	e1240	744	78	e65	75	122
26	107	e52	e88	e99	e410	e1430	e1350	853	77	e65	88	116
27	73	e56	e88	e100	e320	e1900	e1500	717	75	e60	86	122
28	79	e65	e150	e104	e370	e1470	e1600	613	76	e60	171	118
29	102	e60	e130	e99	---	e1060	e1650	537	88	e60	e100	120
30	187	e54	e180	e91	---	e880	e1650	484	79	e60	e450	120
31	e1350	---	e120	e360	---	e830	---	440	---	e60	158	---
TOTAL	3750	3113	2714	10925	19480	24250	33180	34674	5889	2402	3306	3358
MEAN	121	104	87.5	352	696	782	1106	1119	196	77.5	107	112
MAX	1350	211	180	1950	3100	1900	1650	1950	539	168	450	140
MIN	58	52	44	91	180	320	780	440	75	60	60	92
AC-FT	7440	6170	5380	21670	38640	48100	65810	68780	11680	4760	6560	6660

WTR YR 1993 TOTAL 147041 MEAN 403 MAX 3100 MIN 44 AC-FT 291700

e Estimated

WATER TEMPERATURES: April 1992 to September 1993 (discontinued).

INSTRUMENTATION.--Data-collection platform and thermistor.

WATER TEMPERATURES: Maximum recorded, 34.7°C, Aug. 2, 1992; minimum recorded, 3.2°C, Dec. 14, 1992.

WATER TEMPERATURES: Maximum recorded, 31.8°C, Aug. 3; minimum recorded, 3.2°C, Dec. 14.

[illegible]

## VIRGIN RIVER BASIN

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09408135 VIRGIN RIVER ABOVE QUAIL CREEK NEAR HURRICANE, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.3	15.3	19.6	31.2	21.7	26.4	30.2	21.2	25.5	26.4	19.9	22.8
2	23.5	19.6	21.9	31.1	22.9	26.7	31.0	21.4	25.8	26.9	19.6	23.1
3	22.7	18.8	20.5	---	---	---	31.8	21.2	26.1	27.4	19.5	23.1
4	21.2	18.5	19.8	---	---	---	27.5	23.4	25.2	26.6	19.8	23.1
5	19.3	17.1	18.6	30.7	20.4	24.7	30.7	21.8	25.5	27.2	19.5	23.0
6	17.2	16.0	16.6	30.5	21.6	26.0	30.5	21.4	25.5	26.5	19.2	22.5
7	17.8	16.6	17.1	31.1	22.0	26.3	28.0	21.8	24.7	25.6	18.3	21.8
8	19.8	17.1	18.1	30.6	21.5	25.9	29.3	23.3	26.1	26.2	18.0	21.7
9	22.5	17.6	19.7	31.2	19.1	26.0	28.2	22.1	24.7	26.3	17.5	21.6
10	24.8	18.8	21.3	31.1	23.2	26.7	27.9	21.7	24.4	26.3	17.8	21.9
11	26.1	19.4	22.2	30.9	22.6	26.3	27.5	21.3	23.9	25.9	18.2	22.0
12	27.1	19.3	22.6	29.8	21.1	25.3	26.6	19.0	22.7	24.6	18.8	21.6
13	28.7	18.4	23.1	---	---	---	27.3	18.2	22.4	20.2	14.3	17.3
14	29.3	21.1	24.4	29.3	20.1	24.4	27.5	18.1	22.5	22.8	13.9	17.8
15	---	---	---	27.3	20.1	23.6	26.0	18.9	22.2	22.9	14.9	18.7
16	28.3	19.2	23.1	27.7	19.4	23.3	26.3	17.9	21.8	22.7	17.1	19.6
17	24.9	19.1	21.7	28.4	18.8	23.5	27.0	18.2	22.4	21.7	16.6	19.0
18	27.7	18.8	22.7	29.2	19.8	24.2	27.0	18.8	22.7	23.2	16.2	19.2
19	30.0	19.8	24.5	29.4	18.5	24.6	25.6	20.3	22.7	23.3	15.8	19.3
20	28.7	21.7	24.9	29.4	20.7	24.8	27.3	20.1	23.2	23.2	15.8	19.4
21	29.2	21.4	25.0	28.4	20.5	24.1	24.9	20.7	22.5	23.6	16.0	19.7
22	29.5	20.7	24.7	27.7	19.9	23.6	24.4	18.9	21.5	23.7	16.4	19.9
23	29.0	20.5	24.3	28.5	20.3	24.0	27.1	18.5	22.6	22.5	16.1	19.2
24	28.9	17.5	22.7	29.1	19.0	23.5	27.3	18.9	22.7	22.2	14.7	18.3
25	31.1	18.1	24.3	29.3	20.7	24.8	27.6	20.7	23.7	22.7	15.3	18.6
26	31.7	21.6	26.3	29.3	20.6	24.7	27.7	20.9	23.8	23.1	14.9	18.9
27	30.2	21.4	25.6	30.9	19.3	24.9	27.3	20.3	23.4	23.4	16.1	19.4
28	29.6	22.0	25.5	30.7	21.3	25.7	26.3	20.4	23.0	23.4	15.8	19.5
29	30.8	21.4	25.8	26.9	22.6	24.9	25.8	20.0	22.6	23.3	15.8	19.5
30	31.2	21.3	26.1	30.1	21.1	25.4	---	---	---	22.8	16.1	19.4
31	---	---	---	30.0	21.2	25.5	26.7	20.1	22.9	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	27.4	13.9	20.4

## VIRGIN RIVER BASIN

09408150 VIRGIN RIVER NEAR HURRICANE, UT

LOCATION.--Lat 37°10'20", long 113°23'07", in NE¼, SE¼, SE¼, sec. 35, T. 41 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on right bank, 1.2 mi upstream from State Highway 9, 0.6 mi upstream from Quail Creek Reservoir Dam and 5.2 mi west of Hurricane. Prior to Mar. 30, 1993, at site 1.2 mi downstream at different datum.

DRAINAGE AREA.--1,499 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1967 to February 1989, October 1990 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,800 ft above sea level, from topographic map. Prior to Mar. 30, 1993 at different site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Beginning in June 1985, flow is diverted from the river into a pipeline (capacity approximately 250 ft<sup>3</sup>/s), at a point approximately 14 miles upstream (revised), into Quail Creek Reservoir, an offstream site, located about 0.6 mi above the gage, capacity 40,000 acre-feet. Flows also subject to releases from Quail Creek Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 66,000 ft<sup>3</sup>/s, Jan. 1, 1989, result of Quail Creek reservoir dike failure; minimum daily discharge, 23 ft<sup>3</sup>/s, Dec. 11, 1986, at site 1.2 mi downstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1909, 17.34 ft Dec. 6, 1966, from flood-marks; discharge, 20,100 ft<sup>3</sup>/s, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 2,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct. 31	0400	3,750	16.50	Feb. 20	0545	*4,870	*17.69
Jan. 8	1230	3,300	15.97	May 4	0515	2,750	9.48
Feb. 8	1900	4,540	17.36	Aug. 30	0300	3,130	9.82

Minimum daily discharge, 50 ft<sup>3</sup>/s, Dec. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	256	50	128	e425	e400	1040	1820	e500	157	73	175
2	85	189	55	132	e319	e380	e1060	1660	e460	153	76	139
3	92	180	56	143	e283	e420	e1080	1550	427	155	81	138
4	86	171	61	124	e255	e460	e1100	2060	395	165	85	128
5	94	167	70	125	e247	e510	1120	1430	381	193	83	132
6	93	125	78	138	e228	e580	e1040	1240	641	136	76	130
7	91	200	86	207	e226	e645	894	1210	498	171	74	122
8	87	166	118	e2100	e1650	e661	866	1350	430	171	83	115
9	89	164	117	e496	e2760	e677	950	1090	384	166	110	e115
10	89	160	115	e299	e1130	e677	1040	1150	342	211	141	115
11	96	162	111	e456	e653	e725	1100	1430	311	179	115	124
12	96	159	125	e161	e530	e730	1340	1500	287	164	91	131
13	87	111	125	e141	e457	e581	1050	1610	273	165	83	136
14	85	120	103	e775	e406	e567	957	1720	259	152	81	141
15	84	97	104	e596	e359	e630	962	1730	235	e137	81	136
16	85	108	117	e847	e332	e746	1000	1640	227	e132	83	148
17	102	100	121	e1150	e304	e803	1120	1770	214	e151	85	157
18	108	73	138	e1570	e298	e1060	1380	1720	219	149	80	151
19	113	65	138	e733	e1700	e1090	1310	1360	212	139	e90	136
20	115	63	124	e453	e3240	e950	1170	1250	204	118	e90	134
21	109	66	123	e342	e1320	e885	1230	1230	218	92	175	134
22	106	67	122	e349	e849	e961	1360	1150	233	85	128	130
23	99	72	123	e317	e727	e938	1510	1020	229	93	103	128
24	104	65	122	e267	e848	e1040	1500	962	226	86	94	125
25	135	59	112	e244	e706	e1160	1400	916	229	83	90	129
26	131	55	104	e228	e540	e1490	1540	1030	229	82	101	119
27	98	72	103	e234	e480	e1960	1600	889	226	77	96	122
28	101	72	198	e234	e420	e1530	1690	763	189	80	178	115
29	117	73	161	e226	---	e1120	1730	666	167	76	117	116
30	218	63	228	e218	---	e1000	1750	596	158	74	e500	113
31	1550	---	155	e433	---	e951	---	544	---	76	192	---
TOTAL	4628	3500	3563	13866	21692	26327	36889	40056	9003	4068	3535	3934
MEAN	149	117	115	447	775	849	1230	1292	300	131	114	131
MAX	1550	256	228	2100	3240	1960	1750	2060	641	211	500	175
MIN	83	55	50	124	226	380	866	544	158	74	73	113
AC-FT	9180	6940	7070	27500	43030	52220	73170	79450	17860	8070	7010	7800

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968-88, 1991-93, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	120	146	170	219	264	354	456	533	202	116	130	121														
MAX	304	280	440	662	1200	1178	1230	1657	869	248	316	268														
(WY)	1987	1988	1972	1989	1980	1978	1993	1983	1983	1983	1983	1980														
MIN	54.2	56.4	51.4	58.9	59.8	92.8	62.5	72.3	58.6	46.4	71.0	56.8														
(WY)	1991	1991	1987	1991	1991	1977	1977	1972	1974	1972	1978	1977														

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1968-88, 1991-93

	1992	1993	1968-88	1991-93
ANNUAL TOTAL	58565	171061		
ANNUAL MEAN	160	469		
HIGHEST ANNUAL MEAN			235	
LOWEST ANNUAL MEAN			515	
HIGHEST DAILY MEAN	1550	3240	72.2	1980
LOWEST DAILY MEAN	50	50	23	1989
ANNUAL SEVEN-DAY MINIMUM	60	61	31	1986
ANNUAL RUNOFF (AC-FT)	116200	339300	170000	
10 PERCENT EXCEEDS	331	1330	450	
50 PERCENT EXCEEDS	103	180	142	
90 PERCENT EXCEEDS	75	83	65	

e Estimated

WATER-QUALITY RECORDS

WATER TEMPERATURES: April 1992 to September 1993 (discontinued).

INSTRUMENTATION.--Data-collection platform and thermistor.

WATER TEMPERATURES: Maximum recorded, 31.9°C, Aug. 3, 1993; minimum recorded, 1.7°C, Dec. 21, 22, 1992.

WATER TEMPERATURES: Maximum recorded, 31.9°C, Aug. 3; minimum recorded, 1.7°C, Dec. 21, 22.

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	23.6	15.6	19.2	14.0	10.2	12.0	10.8	5.0	7.5	9.1	6.5	7.7
2	21.9	15.2	18.3	15.4	11.1	12.7	10.6	6.7	8.3	8.4	6.7	7.9
3	---	---	---	12.3	9.0	10.5	9.7	5.4	7.6	6.7	3.6	5.5
4	21.0	13.7	16.9	11.4	8.2	9.7	8.3	4.4	6.0	6.4	2.7	4.3
5	20.8	13.3	16.8	12.1	8.3	9.9	8.0	4.4	6.6	6.3	3.2	4.7
6	21.4	13.9	17.1	12.8	8.8	10.5	9.4	7.2	8.2	6.8	5.1	5.9
7	19.2	11.3	14.7	12.4	9.4	10.8	9.8	7.1	8.1	8.3	6.5	7.4
8	19.5	11.9	15.2	13.1	9.0	11.1	9.7	7.1	8.2	7.8	4.3	5.2
9	19.6	12.4	15.7	---	---	---	10.2	8.1	8.9	8.8	5.3	6.2
10	20.4	12.9	16.3	---	---	---	10.9	7.0	8.7	7.9	6.7	7.4
11	20.4	13.3	16.5	10.2	5.9	7.7	9.6	7.1	8.4	6.7	5.1	5.9
12	---	---	---	10.9	6.7	8.7	9.4	6.6	8.4	7.1	4.0	5.5
13	20.7	13.2	16.6	12.5	7.5	9.8	7.1	3.8	5.4	7.6	5.8	6.7
14	20.7	13.5	16.6	13.9	8.8	11.2	6.5	3.2	4.8	8.1	4.7	5.8
15	20.5	13.9	16.8	14.7	9.2	11.6	---	---	---	7.7	5.5	6.4
16	20.7	14.3	16.9	14.8	10.3	12.0	6.4	3.1	4.5	7.9	6.6	7.2
17	20.3	13.4	16.6	14.4	9.8	11.7	7.4	3.8	5.2	7.7	5.8	6.8
18	20.5	14.0	16.7	14.7	9.6	11.8	6.7	4.1	5.5	7.2	5.4	6.0
19	20.2	13.9	16.7	13.6	9.3	11.4	5.7	2.7	3.9	7.9	5.5	6.7
20	20.2	13.5	16.5	11.7	7.5	9.8	4.9	2.0	3.3	8.3	6.5	7.5
21	18.5	13.8	16.1	11.2	6.2	8.6	5.2	1.7	3.3	9.8	7.9	8.8
22	20.8	15.4	17.5	13.3	8.2	10.1	5.2	1.7	3.4	9.6	7.9	8.8
23	20.3	14.3	16.6	12.5	7.3	9.0	5.8	2.0	3.6	8.2	6.0	6.9
24	17.2	15.4	16.3	10.5	5.5	7.5	6.6	2.5	4.2	7.4	5.2	6.3
25	20.7	15.6	17.5	9.4	4.4	6.2	6.5	2.7	4.3	8.0	5.2	6.6
26	19.6	15.1	16.9	10.0	3.6	6.5	6.0	2.4	4.0	8.2	5.5	7.0
27	18.0	15.1	16.4	10.3	4.6	7.1	5.4	2.6	4.1	8.8	6.0	7.4
28	18.5	15.4	16.5	10.4	5.0	7.2	8.2	5.3	6.2	8.9	6.3	7.6
29	17.9	14.8	16.0	9.9	5.6	7.1	8.3	6.0	7.2	7.8	6.1	6.9
30	15.8	13.6	15.1	10.4	4.6	7.0	8.7	6.7	7.6	6.9	5.7	6.2
31	13.6	9.6	11.4	---	---	---	8.3	5.7	6.9	7.1	5.8	6.3
MONTH	---	---	---	---	---	---	---	---	---	9.8	2.7	6.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	7.4	5.7	6.4	8.9	6.2	7.4	---	---	---	---	---	---
2	8.5	5.6	7.0	9.6	6.3	7.8	---	---	---	---	---	---
3	8.1	5.3	6.7	---	---	---	---	---	---	---	---	---
4	8.9	5.9	7.1	10.0	6.9	8.4	---	---	---	---	---	---
5	7.9											



## VIRGIN RIVER BASIN

09408150 VIRGIN RIVER NEAR HURRICANE, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

[illegible]

## VIRGIN RIVER BASIN

165

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT

LOCATION.--Lat 37°06'54", long 113°26'18", in NE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, sec. 20 (revised), T. 42 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on right bank, 0.2 mi below diversion, 2.2 mi southeast of Washington, Utah.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1, 1987 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 2,680 ft above sea level, from topographic map.

REMARKS.--No estimated discharges. Completely regulated canal. Records good except those for flows below 10 ft<sup>3</sup>/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 116 ft<sup>3</sup>/s Oct. 22, 1989; no flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	.00	38	.00	52	40	70	91	97	96	77	83
2	85	19	38	.00	48	38	76	87	93	96	80	80
3	88	39	38	.00	48	37	77	82	101	96	92	79
4	62	39	38	.00	44	39	77	91	101	96	98	78
5	58	39	38	.00	38	41	73	84	100	99	99	77
6	87	38	39	.00	33	42	78	73	101	94	93	77
7	87	40	39	.00	32	32	76	79	89	100	89	77
8	86	39	40	.00	35	.00	75	83	86	100	97	81
9	87	38	40	.00	10	.00	78	76	83	102	103	82
10	86	37	40	.00	30	.00	75	79	75	104	102	84
11	89	37	40	.00	30	.00	78	84	67	103	104	92
12	89	36	41	.00	27	.00	71	75	100	102	100	98
13	83	35	42	.00	26	.00	69	81	106	102	97	99
14	80	34	42	.00	28	.00	66	79	107	102	96	99
15	81	33	42	.00	28	.00	66	84	107	102	95	98
16	81	20	43	.00	35	2.6	73	72	105	102	97	99
17	83	22	43	.00	31	55	76	80	104	104	98	100
18	83	38	44	.00	34	50	81	76	108	104	90	100
19	83	38	45	.00	40	43	82	79	102	101	69	98
20	81	38	45	.00	3.0	41	78	72	99	94	97	98
21	80	38	45	.00	.00	44	76	78	99	93	106	99
22	75	38	44	.00	12	68	82	73	100	87	102	105
23	71	38	43	.00	35	78	92	74	100	96	99	104
24	65	38	43	.00	36	84	90	64	99	91	97	104
25	54	38	42	16	34	60	98	43	99	87	97	105
26	54	38	41	35	37	61	96	78	99	87	98	102
27	53	38	26	42	40	59	101	80	99	82	95	103
28	53	39	1.9	42	42	52	96	82	96	83	103	99
29	53	38	.00	42	---	63	99	85	93	80	100	99
30	51	38	.00	39	---	76	92	60	96	78	91	96
31	38	---	.00	51	---	71	---	96	---	80	83	---
TOTAL	2288	1040.00	1100.90	267.00	888.00	1176.60	2417	2420	2911	2943	2944	2795
MEAN	73.8	34.7	35.5	8.61	31.7	38.0	80.6	78.1	97.0	94.9	95.0	93.2
MAX	89	40	45	51	52	84	101	96	108	104	106	105
MIN	38	.00	.00	.00	.00	.00	66	43	67	78	69	77
AC-FT	4540	2060	2180	530	1760	2330	4790	4800	5770	5840	5840	5540

CAL YR 1992 TOTAL 20735.80 MEAN 56.7 MAX 101 MIN .00 AC-FT 41130  
WTR YR 1993 TOTAL 23190.50 MEAN 63.5 MAX 108 MIN .00 AC-FT 46000

## VIRGIN RIVER BASIN

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: December 1987 to current year.

WATER TEMPERATURES: December 1987 to current year.

REMARKS.--Records are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 5,330 microsiemens, July 19, 1990; minimum, 510 microsiemens, May

4, 15, 1993.

WATER TEMPERATURES: Maximum, 32.7°C, July 15, 1988; minimum, 0.0°C, Dec. 21, 1990.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 3,970 microsiemens, Dec. 2; minimum recorded, 510 microsiemens,

May 4, 15.

WATER TEMPERATURES: Maximum recorded, 30.5°C, Aug. 3; minimum recorded, 1.5°C, Dec. 21.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

[illegible]

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

[illegible]

## VIRGIN RIVER BASIN

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	7.7	6.0	6.7	10.2	6.9	8.2	14.2	10.8	12.6	12.7	9.8	11.3
2	9.2	5.8	7.3	11.3	7.0	8.9	13.0	10.0	11.8	12.5	10.3	11.6
3	8.8	5.6	7.1	10.7	7.5	8.9	12.3	8.8	10.9	14.2	10.6	12.4
4	9.8	6.0	7.5	12.1	8.3	9.8	11.9	9.5	10.9	13.6	9.2	11.2
5	8.6	6.0	7.1	12.7	8.6	10.2	11.3	9.3	10.5	11.5	7.9	9.6
6	9.7	6.4	8.0	12.8	8.8	10.4	11.1	8.6	10.1	12.6	9.2	10.9
7	9.7	7.8	8.8	12.9	9.1	---	12.2	8.5	10.4	15.1	10.8	12.9
8	9.4	---	---	---	---	---	12.8	9.1	11.0	13.7	10.7	12.4
9	7.1	---	---	---	---	---	13.0	9.9	11.6	14.7	9.8	12.2
10	8.6	6.0	7.3	---	---	---	13.1	9.7	11.5	16.1	11.1	13.8
11	9.8	6.8	8.3	---	---	---	13.3	10.0	11.9	15.9	12.1	14.3
12	10.9	8.0	9.2	---	---	---	12.4	9.2	10.5	---	13.0	14.4
13	10.7	7.7	8.9	---	---	---	11.3	7.4	9.4	15.4	12.9	14.1
14	9.3	7.0	7.9	---	---	---	12.0	8.3	10.3	16.5	13.8	15.0
15	---	---	---	---	---	---	11.4	8.7	10.3	15.6	14.0	14.8
16	9.3	7.4	8.2	---	---	---	13.4	9.1	11.4	14.9	13.8	14.3
17	---	7.6	---	12.9	10.5	11.7	13.2	10.3	11.9	16.5	13.2	14.7
18	9.4	7.9	8.7	12.7	10.8	11.9	13.1	10.5	11.9	15.7	14.1	14.8
19	9.5	---	---	11.8	8.5	10.4	11.9	8.7	10.6	17.3	13.5	15.4
20	---	---	---	11.6	9.1	10.6	12.3	8.8	10.8	18.0	14.4	16.2
21	---	---	---	12.9	9.2	11.1	13.1	9.9	11.7	17.7	14.3	16.1
22	---	---	---	12.6	8.9	11.1	12.8	10.4	11.8	17.7	13.9	15.9
23	8.6	6.9	7.8	12.9	9.0	11.3	12.6	10.3	11.7	18.6	14.5	16.5
24	8.8	7.3	8.0	12.3	9.4	11.0	12.8	10.1	11.6	19.1	14.7	16.9
25	9.1	6.5	7.7	11.9	9.6	---	13.2	10.0	11.8	18.5	14.9	16.8
26	9.1	7.0	8.0	10.0	9.5	---	12.9	10.7	12.0	18.5	14.7	16.8
27	9.8	7.2	8.2	9.7	7.2	8.2	13.4	10.8	12.2	19.8	14.4	17.1
28	8.0	7.3	7.7	9.0	7.1	8.1	13.3	10.8	12.2	17.4	15.3	16.4
29	---	---	---	11.8	7.3	9.1	12.8	10.7	11.8	19.3	14.3	16.6
30	---	---	---	12.6	8.8	10.8	13.4	10.9	12.0	20.7	---	---
31	---	---	---	13.9	10.0	12.0	---	---	---	19.0	16.6	17.9
MONTH	---	---	---	---	---	---	14.2	7.4	11.3	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	20.8	16.2	18.3	27.3	19.2	23.0	29.8	22.2	25.9	27.0	20.7	23.8
2	20.8	16.7	18.6	26.8	19.9	23.1	30.3	22.3	26.0	27.6	20.6	23.9
3	20.4	16.1	18.1	26.5	20.1	22.8	30.5	22.9	26.2	27.9	20.6	24.1
4	19.1	16.1	17.4	26.0	19.5	22.5	27.3	23.3	25.2	27.0	20.9	24.0
5	16.8	14.8	16.3	25.1	18.0	21.4	30.1	21.8	25.4	27.5	20.4	23.7
6	16.0	14.2	14.9	27.5	19.7	23.0	29.8	22.2	25.7	26.6	20.1	23.2
7	17.1	14.1	15.5	27.0	19.5	22.9	27.6	22.4	24.8	26.1	19.3	22.6
8	20.1	14.6	16.9	27.1	19.6	23.0	29.5	22.8	25.8	26.7	18.7	22.5
9	21.2	15.2	17.9	27.0	19.6	23.0	27.6	22.5	25.0	26.6	18.6	22.5
10	22.1	16.0	18.9	27.4	20.0	23.3	27.7	22.2	24.7	26.8	18.9	22.7
11	22.8	16.7	---	27.4	20.1	23.3	27.2	21.9	24.4	26.2	19.1	22.5
12	23.2	17.1	20.0	26.7	19.6	22.8	26.7	19.6	23.0	24.9	19.7	22.3
13	24.3	16.8	20.4	26.5	19.7	22.7	27.1	18.8	22.7	21.7	16.0	18.7
14	25.1	18.4	21.5	26.3	18.7	22.2	27.1	19.0	22.9	22.9	14.4	18.1
15	23.5	18.3	20.9	24.7	18.6	21.5	25.9	19.8	22.7	23.3	15.8	19.5
16	24.1	17.8	20.6	24.9	18.1	21.1	26.5	18.4	22.1	23.0	17.9	20.4
17	21.9	17.1	19.4	25.0	17.2	20.8	27.0	18.7	22.8	21.4	17.3	19.4
18	23.8	16.8	19.8	25.8	17.5	21.2	26.8	19.5	23.0	23.1	16.9	19.7
19	25.1	17.4	21.0	25.3	17.7	21.5	25.7	21.3	23.4	23.4	16.2	19.7
20	24.3	18.7	21.4	26.6	18.5	22.3	27.2	21.4	23.9	23.2	16.5	19.8
21	24.4	18.6	21.2	26.5	19.2	22.7	26.6	21.1	23.7	23.6	16.2	19.7
22	24.2	18.3	20.9	26.2	19.1	22.7	25.7	18.5	22.0	23.5	16.7	19.9
23	24.1	18.1	20.6	27.3	19.7	23.2	27.3	19.3	23.0	22.2	16.3	19.1
24	23.0	16.8	19.4	27.6	19.6	23.2	27.2	20.0	23.5	22.1	15.0	18.3
25	24.0	16.4	19.7	28.3	20.5	24.3	27.8	21.5	24.2	22.5	15.0	18.6
26	24.6	17.9	20.7	28.5	20.6	24.4	28.1	21.8	24.6	22.6	15.3	18.8
27	23.7	17.6	20.2	29.2	21.0	24.9	27.8	21.2	24.4	23.1	15.5	19.1
28	24.9	17.1	20.5	29.6	21.5	25.5	27.8	21.0	24.1	22.7	15.7	19.1
29	26.6	18.4	22.1	26.3	22.4	24.6	27.0	21.0	23.7	22.6	15.7	19.1
30	26.9	18.9	22.6	29.5	21.2	25.1	23.8	18.6	21.7	22.2	15.9	18.9
31	---	---	---	29.8	21.6	25.5	27.0	20.7	23.5	---	---	---
MONTH	26.9	14.1	---	29.8	17.2	23.0	30.5	18.4	24.0	27.9	14.4	20.8

## VIRGIN RIVER BASIN

169

09408400 SANTA CLARA RIVER NEAR PINE VALLEY, UT

LOCATION.--Lat 37°23'00" long 113°28'57", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 24, T. 39 S., R. 15 W., Washington County, Hydrologic Unit 15010008, in Dixie National Forest, on right bank 150 ft upstream from highway bridge, 0.6 mi downstream from Pine Valley Reservoir, 1.6 mi southeast of town of Pine Valley, and 2.5 mi upstream from Grass Valley Creek.

DRAINAGE AREA.--18.7 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,640 ft above sea level, from topographic map.

REMARKS.--Records good except those for period Feb. 25 to Apr. 2, which are fair, and those for estimated daily discharges, which are poor. Flow slightly regulated by Pine Valley Reservoir. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 776 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 6.85 ft; minimum daily discharge, 0.51 ft<sup>3</sup>/s Feb. 15, 1990.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 16	2400	*168	*3.18	No other peak greater than base discharge			
Minimum daily discharge, 1.3 ft <sup>3</sup> /s, Feb. 15.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.4	e2.4	e2.0	e2.0	3.5	23	58	71	33	16	8.5
2	3.0	3.2	e2.5	e2.1	e2.1	3.5	26	54	67	32	16	8.2
3	3.0	3.1	e2.2	e2.0	e2.2	3.7	25	56	62	32	16	8.0
4	3.1	3.1	e2.3	e2.0	e2.1	3.9	26	70	56	31	16	7.8
5	3.1	3.0	e2.4	e2.1	e1.9	4.5	26	49	59	30	15	7.6
6	3.1	3.0	e2.4	e2.2	e1.8	5.7	23	38	60	29	15	7.5
7	3.1	3.0	e2.4	e2.3	e1.7	7.7	20	35	50	28	15	7.4
8	3.2	2.9	e2.3	e2.3	e1.7	10	20	36	47	26	15	7.3
9	3.1	2.9	e2.2	e2.1	e1.8	11	22	34	43	26	14	7.1
10	3.1	3.0	e2.1	e2.0	e1.8	12	24	38	42	25	14	6.9
11	3.1	2.9	e2.2	e2.0	e1.7	11	27	53	43	25	13	6.7
12	3.1	2.9	e2.2	e2.1	e1.6	10	28	75	49	24	13	6.5
13	3.1	2.9	e2.0	e2.2	e1.5	9.0	24	101	53	24	13	6.4
14	3.1	2.9	e1.9	e2.3	e1.4	9.6	22	113	56	23	12	6.4
15	3.1	2.9	e2.0	e2.4	e1.3	10	20	111	58	23	12	6.4
16	3.1	2.8	e1.9	e2.5	e1.4	13	21	115	59	23	12	6.2
17	3.1	2.7	e1.9	e2.5	e1.5	16	25	149	55	22	11	6.2
18	3.1	2.7	e2.2	e2.5	e1.8	22	30	123	49	22	11	6.2
19	3.0	2.7	e2.0	e2.5	e2.7	22	30	97	47	21	11	6.0
20	3.0	2.7	e1.9	e2.1	e3.2	21	29	106	46	21	11	5.8
21	2.8	2.7	e2.0	e2.2	e3.9	22	32	124	46	21	10	5.7
22	3.0	2.8	e1.9	e2.1	e4.5	23	40	109	46	20	10	5.6
23	3.0	e2.6	e1.8	e2.1	16	25	45	92	43	20	9.7	5.7
24	3.3	e1.9	e1.9	e2.0	4.7	27	41	96	41	20	9.4	5.5
25	3.5	e2.3	e2.0	e2.0	4.1	31	40	99	39	19	9.2	5.4
26	3.2	e2.4	e2.0	e2.2	3.7	38	46	103	38	19	9.3	5.3
27	3.1	e2.3	e2.0	e2.2	3.7	34	52	104	37	18	9.3	5.2
28	3.3	e2.3	e2.2	e2.0	3.7	24	53	93	37	18	9.3	5.1
29	3.3	e2.4	e2.3	e2.0	---	20	55	78	36	18	9.4	5.1
30	3.9	e2.3	e2.2	e1.9	---	18	59	73	35	17	10	5.0
31	4.5	---	e2.0	e2.0	---	19	---	71	---	17	8.8	---
TOTAL	98.6	83.2	65.7	66.9	81.5	490.1	954	2553	1470	727	375.4	192.7
MEAN	3.18	2.77	2.12	2.16	2.91	15.8	31.8	82.4	49.0	23.5	12.1	6.42
MAX	4.5	3.4	2.5	2.5	16	38	59	149	71	33	16	8.5
MIN	2.8	2.3	1.8	1.9	1.3	3.5	20	34	35	17	8.8	5.0
AC-FT	196	165	130	133	162	972	1890	5060	2920	1440	745	382

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1993, BY WATER YEAR (WY)

MEAN	3.50	3.88	3.86	2.75	3.19	6.12	17.7	34.9	25.1	10.2	5.84	3.91
MAX	12.5	21.4	30.3	5.08	7.67	15.8	43.4	122	126	47.9	23.2	12.1
(WY)	1973	1988	1967	1979	1960	1993	1969	1973	1983	1983	1983	1983
MIN	.84	.95	1.02	1.10	.68	1.20	1.66	5.03	2.63	1.21	1.07	1.02
(WY)	1978	1978	1978	1990	1990	1977	1977	1989	1963	1963	1960	1977

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1960 - 1993
ANNUAL TOTAL	3922.8	7158.1	
ANNUAL MEAN	10.7	19.6	
HIGHEST ANNUAL MEAN			10.1
LOWEST ANNUAL MEAN			29.4
HIGHEST DAILY MEAN	57 May 6	149 May 17	2.30 1977
LOWEST DAILY MEAN	1.1 Jan 1	1.3 Feb 15	.51 Feb 15 1990
ANNUAL SEVEN-DAY MINIMUM	1.2 Jan 1	1.5 Feb 11	.55 Feb 13 1990
ANNUAL RUNOFF (AC-FT)	7780	14200	7320
10 PERCENT EXCEEDS	33	53	24
50 PERCENT EXCEEDS	4.0	7.7	3.9
90 PERCENT EXCEEDS	2.2	2.0	1.6

e Estimated



## VIRGIN RIVER BASIN

09408500 SANTA CLARA-PINTO DIVERSION NEAR PINTO, UT  
(Transmountain diversion)

LOCATION.--Lat 37°28'04", long 113°28'21", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 19, T. 38 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on right bank 0.2 mi downstream from outlet of diversion tunnel and 6 mi southeast of Pinto.

PERIOD OF RECORD.--October 1953 to September 1962 (monthly discharge only, October 1953 to September 1960), October 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,820 ft above sea level, from topographic map. Prior to September 1962, at site 600 ft upstream at different datum. Prior to October 1990, at same location at datum 3.0 ft higher.

REMARKS.--Records good except those for estimated daily discharges and those below 1.0 ft<sup>3</sup>/s, which are poor. Flow at this station is seasonal occurring during the snowmelt period and heavy storm periods. This is a transmountain diversion from a tributary of Santa Clara River in Colorado River Basin to Pinto Creek in Escalante Valley in the Great Basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 229 ft<sup>3</sup>/s, May 24, 1983, gage height, 5.58 ft present datum; no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 88 ft<sup>3</sup>/s at 0530 hrs, Mar. 25, gage height, 5.59 ft; no flow for extended periods during year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	e8.0	57	29	.39	.00	.00
2	.00	.00	.00	.00	.00	.00	e8.0	52	25	.30	.00	.00
3	.00	.00	.00	.00	.00	.00	12	51	22	.13	.00	.00
4	.00	.00	.00	.00	.00	.00	28	60	19	.09	.00	.00
5	.00	.00	.00	.00	.00	.00	31	48	21	.06	.00	.00
6	.00	.00	.00	.00	.00	.00	19	35	32	.02	.00	.00
7	.00	.00	.00	.00	.00	.00	8.4	30	23	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	5.9	28	20	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	7.3	25	14	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	10	28	12	.00	.00	.00
11	.00	.00	.00	.00	.00	.01	16	37	12	.00	.00	.00
12	.00	.00	.00	.00	.00	.02	37	51	13	.00	.00	.00
13	.00	.00	.00	.00	.00	.01	36	62	15	.00	.00	.00
14	.00	.00	.00	.00	.00	.01	32	65	14	.00	.00	.00
15	.00	.00	.00	.00	.00	.01	31	65	14	.00	.00	.00
16	.00	.00	.00	.00	.00	14	30	63	13	.00	.00	.00
17	.00	.00	.00	.00	.00	48	40	65	12	.00	.00	.00
18	.00	.00	.00	.00	.00	3.9	49	64	9.9	.00	.00	.00
19	.00	.00	.00	.00	.00	12	47	53	8.2	.00	.00	.00
20	.00	.00	.00	.00	.00	9.0	41	52	7.4	.00	.00	.00
21	.00	.00	.00	.00	.00	13	44	57	7.0	.00	.00	.00
22	.00	.00	.00	.00	.00	15	53	54	6.5	.00	.00	.00
23	.00	.00	.00	.00	.00	31	42	46	5.9	.00	.00	.00
24	.00	.00	.00	.00	.00	55	15	44	5.0	.00	.00	.00
25	.00	.00	.00	.00	.00	49	20	44	4.4	.00	.00	.00
26	.00	.00	.00	.00	.00	e16	55	44	3.4	.00	.00	.00
27	.00	.00	.00	.00	.00	e15	60	45	1.9	.00	.00	.00
28	.00	.00	.00	.00	.00	e9.5	60	41	1.3	.00	.00	.00
29	.00	.00	.00	.00	---	e8.5	60	35	.82	.00	.00	.00
30	.00	.00	.00	.00	---	e7.6	59	29	.59	.00	.00	.00
31	.00	---	.00	.00	---	e7.8	---	29	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	314.36	965.6	1459	372.31	0.99	0.00	0.00
MEAN	.000	.000	.000	.000	.000	10.1	32.2	47.1	12.4	.032	.000	.000
MAX	.00	.00	.00	.00	.00	55	60	65	32	.39	.00	.00
MIN	.00	.00	.00	.00	.00	.00	5.9	25	.59	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	624	1920	2890	738	2.0	.00	.00

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961-62, 1970-93, BY WATER YEAR (WY)

	1961	1962	1972	1984	1984	1983	1978	1983	1983	1983	1983	1983
MEAN	.61	1.14	.22	.11	.38	3.43	17.5	20.3	7.02	.21	.41	.003
MAX	14.4	13.5	2.13	1.54	2.12	14.0	59.9	73.4	42.6	1.95	7.97	.074
(WY)	1973	1973	1972	1984	1984	1983	1978	1983	1983	1983	1984	1983
MIN	.000	.000	.000	.000	.000	.000	.000	.024	.000	.000	.000	.000
(WY)	1961	1962	1962	1962	1973	1973	1977	1989	1974	1961	1961	1961

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1961-62, 1970-93

ANNUAL TOTAL	2105.69	3112.26	
ANNUAL MEAN	5.75	8.53	4.28
HIGHEST ANNUAL MEAN			13.8
LOWEST ANNUAL MEAN			.27
HIGHEST DAILY MEAN	56	65	180
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
ANNUAL RUNOFF (AC-FT)	4180	6170	3100
10 PERCENT EXCEEDS	24	40	13
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated

## VIRGIN RIVER BASIN

171

09409100 SANTA CLARA RIVER ABOVE BAKER RESERVOIR NEAR CENTRAL, UT

LOCATION.--Lat 37°23'05", long 113°37'52", in NE<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> (revised) sec. 22, T. 39 S., R. 16 W., Washington County, Hydrologic Unit 15010008, on left bank 2.3 mi south of Central, Utah, 4.0 mi north of Veyo, Utah.

DRAINAGE AREA.--116 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,875 ft above sea level, from topographic map.

REMARKS.--Records good except those for discharges below 2.0 ft<sup>3</sup>/s and Feb. 19, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 460 ft<sup>3</sup>/s (estimated), Feb. 19, 1993, gage height, 3.70 ft; minimum daily discharge, 0.13 ft<sup>3</sup>/s, Aug. 15, 16, 1991.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 6, 1966 reached a discharge of 2,080 ft<sup>3</sup>/s, from flow over dam measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 460 ft<sup>3</sup>/s (estimated) at 2030 hrs, Feb. 19, gage height, 3.70 ft; minimum daily discharge, 0.84 ft<sup>3</sup>/s Aug. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	11	11	10	10	3.5	45	57	55	14	2.5	1.2
2	7.8	10	12	10	9.5	3.4	47	50	53	14	2.1	1.3
3	7.9	9.5	11	9.9	9.4	3.5	39	44	48	13	2.1	1.4
4	7.8	9.3	11	10	9.5	3.6	39	66	45	12	2.9	1.3
5	8.0	10	11	10	9.2	3.6	42	48	47	12	3.6	1.3
6	7.9	10	11	9.8	8.9	3.7	42	30	65	11	2.6	1.3
7	7.8	10	11	10	4.9	4.8	34	21	46	10	3.2	1.3
8	7.9	9.9	12	12	11	7.2	29	19	36	9.9	3.7	1.3
9	7.8	9.9	11	12	13	7.9	29	15	33	9.5	3.3	1.5
10	7.7	10	11	10	7.0	10	32	16	27	9.7	2.0	1.5
11	7.5	10	11	10	4.1	9.7	34	22	26	9.8	2.3	1.4
12	7.2	10	11	9.9	3.1	7.5	40	47	32	9.7	2.0	1.4
13	6.9	10	10	9.8	2.7	5.9	32	79	41	9.1	1.9	1.4
14	6.6	10	10	11	2.6	7.3	25	108	49	9.2	1.7	1.3
15	6.6	10	11	10	2.7	11	20	128	48	8.8	1.8	1.1
16	6.6	9.9	11	21	2.5	14	17	120	54	9.1	1.6	1.1
17	6.9	10	11	34	2.3	27	17	182	53	8.7	1.4	1.1
18	7.0	10	11	59	2.4	48	23	163	44	8.7	1.4	1.1
19	7.1	10	10	12	e110	29	23	108	37	8.3	1.3	1.1
20	7.1	10	10	10	66	24	19	102	32	7.8	1.1	1.1
21	6.8	10	10	9.8	10	25	19	143	33	7.6	1.2	.99
22	7.4	11	10	10	6.1	26	28	135	32	7.6	1.2	1.0
23	7.6	11	10	10	4.1	43	41	82	27	7.3	.93	1.0
24	8.1	11	10	9.8	4.3	110	40	85	23	5.5	.85	1.1
25	8.2	10	10	9.9	3.9	121	37	85	19	3.5	.84	1.1
26	8.1	11	10	9.8	3.6	126	42	87	18	2.7	.88	1.2
27	7.9	11	10	9.9	3.5	158	51	98	18	2.7	1.1	1.2
28	8.5	12	11	9.9	3.5	87	53	93	16	2.9	1.2	1.2
29	9.4	11	11	10	---	52	55	64	17	2.6	1.4	1.2
30	12	11	9.9	9.7	---	43	58	59	16	2.9	2.0	1.2
31	14	---	10	10	---	46	---	55	---	2.6	1.2	---
TOTAL	245.9	308.5	329.9	399.2	329.8	1071.6	1052	2411	1090	252.2	57.30	36.69
MEAN	7.93	10.3	10.6	12.9	11.8	34.6	35.1	77.8	36.3	8.14	1.85	1.22
MAX	14	12	12	59	110	158	58	182	65	14	3.7	1.5
MIN	6.6	9.3	9.9	9.7	2.3	3.4	17	15	16	2.6	.84	.99
AC-FT	488	612	654	792	654	2130	2090	4780	2160	500	114	.73

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1993, BY WATER YEAR (WY)

	1990	1991	1992	1993
MEAN	2.59	3.10	4.81	5.54
MAX	7.93	10.3	10.6	12.9
(WY)	1993	1993	1993	1993
MIN	.41	.50	.40	.55
(WY)	1992	1990	1990	1990

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1990 - 1993

ANNUAL TOTAL	3095.42	7584.09	7.90	
ANNUAL MEAN	8.46	20.8	20.8	1993
HIGHEST ANNUAL MEAN			1.39	1990
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	42	182	182	May 17 1993
LOWEST DAILY MEAN	.54	1.84	.13	Aug 15 1991
ANNUAL SEVEN-DAY MINIMUM	.64	1.0	.18	Aug 14 1991
ANNUAL RUNOFF (AC-FT)	6140	15040	5730	
10 PERCENT EXCEEDS	18	53	17	
50 PERCENT EXCEEDS	7.8	10	1.7	
90 PERCENT EXCEEDS	.72	1.4	.43	

e Estimated

## VIRGIN RIVER BASIN

09409880 SANTA CLARA RIVER AT GUNLOCK, UT

LOCATION.--Lat 37°16'55", long 113°46'00", in SW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 28, T. 40 S., R. 17 W., Washington County, Hydrologic Unit 15010008, on right bank at downstream side of bridge on county road at Gunlock, 0.5 mi below tailrace of powerhouse.

DRAINAGE AREA.--271 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,628 ft above sea level, from topographic map.

REMARKS.--Records good except those for Apr. 1-20, and for estimated daily discharges, which are poor. Many diversions for irrigation above station. Flow regulated by several reservoirs and powerplant above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,810 ft<sup>3</sup>/s Feb. 14, 1980, gage height, 5.74 ft from rating curve extended above 1,600 ft<sup>3</sup>/s; no flow several days during 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 959 ft<sup>3</sup>/s, Jan. 18 at 1200 hrs, gage height, 5.58 ft from rating curve extended above 910 ft<sup>3</sup>/s; maximum gage height, 5.61 ft, Feb. 8 at 2200 hrs, discharge was lower due to natural channel fill; minimum daily discharge, 4.1 ft<sup>3</sup>/s, Aug. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	23	14	18	39	93	171	95	91	e43	4.5	14
2	9.9	21	14	17	38	84	175	96	84	e42	5.3	12
3	9.9	21	14	17	36	87	148	96	78	e34	4.1	11
4	9.1	22	14	17	35	88	141	102	74	e30	4.5	12
5	9.6	23	14	17	34	95	140	104	73	e29	5.8	15
6	8.6	25	14	16	31	128	132	88	89	e28	6.0	9.8
7	7.4	22	15	18	32	187	119	75	82	e26	5.9	8.9
8	7.8	16	15	168	139	211	106	66	69	e24	7.1	9.1
9	7.9	16	15	58	172	225	101	62	63	e24	9.3	7.6
10	9.2	16	15	37	e254	239	100	60	56	e22	9.5	7.6
11	10	15	15	39	e128	275	97	62	53	e21	9.6	7.0
12	9.5	13	15	24	e73	239	91	84	55	e21	11	6.9
13	9.5	11	14	24	e47	184	85	112	57	e21	9.7	8.6
14	9.5	12	14	188	e34	187	75	130	58	e20	8.7	9.9
15	9.5	14	13	124	e27	207	66	142	60	e19	9.6	9.6
16	9.8	13	13	247	e21	227	67	133	59	e18	12	9.4
17	9.9	13	13	345	e19	259	67	170	58	e18	10	9.1
18	9.9	13	13	682	e21	311	69	178	57	e18	9.3	9.5
19	9.4	15	14	151	e243	247	e67	145	e70	e18	8.5	8.9
20	8.9	19	14	75	273	205	e67	128	e69	e18	8.5	10
21	9.1	21	15	62	153	205	73	138	e65	e17	7.9	9.7
22	9.6	20	15	67	128	215	74	155	e60	e17	7.2	8.8
23	9.9	19	14	62	119	213	81	131	e56	16	8.6	8.5
24	9.9	17	13	50	118	267	83	118	e52	15	7.5	8.1
25	9.9	16	13	46	116	352	82	114	e50	13	6.4	8.5
26	9.9	14	13	43	107	329	82	116	e49	11	41	7.9
27	9.9	14	13	41	110	339	84	119	e49	8.3	8.3	8.4
28	12	14	14	41	107	286	89	118	e48	7.5	8.1	9.0
29	11	14	14	42	---	221	95	105	e48	6.7	13	8.3
30	14	14	19	37	---	177	97	99	e45	6.2	65	8.7
31	79	---	19	37	---	163	---	95	---	3.9	16	---
TOTAL	369.0	506	444	2810	2654	6545	2924	3436	1877	615.6	347.9	281.8
MEAN	11.9	16.9	14.3	90.6	94.8	211	97.5	111	62.6	19.9	11.2	9.39
MAX	79	25	19	682	273	352	175	178	91	43	65	15
MIN	7.4	11	13	16	19	84	66	60	45	3.9	4.1	6.9
AC-FT	732	1000	881	5570	5260	12980	5800	6820	3720	1220	690	559

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1993, BY WATER YEAR (WY)

	10.9	15.1	15.4	19.4	38.1	51.4	42.3	45.1	32.1	11.6	9.45	8.44
MEAN	10.9	15.1	15.4	19.4	38.1	51.4	42.3	45.1	32.1	11.6	9.45	8.44
MAX	28.0	30.9	26.0	95.4	372	211	150	222	138	38.1	30.5	26.5
(WY)	1984	1981	1981	1980	1980	1979	1973	1973	1973	1980	1980	1980
MIN	3.14	5.78	7.72	4.73	7.69	8.08	6.05	5.14	4.85	2.72	3.10	2.79
(WY)	1992	1990	1978	1972	1972	1971	1977	1989	1972	1977	1989	1990

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1970 - 1993

ANNUAL TOTAL	9005.7	22810.3	
ANNUAL MEAN	24.6	62.5	
HIGHEST ANNUAL MEAN			24.8
LOWEST ANNUAL MEAN			86.8
HIGHEST DAILY MEAN	202	Feb 13	2040
LOWEST DAILY MEAN	2.3	Aug 20	.00
ANNUAL SEVEN-DAY MINIMUM	4.1	Aug 18	.02
ANNUAL RUNOFF (AC-FT)	17860	45240	17990
10 PERCENT EXCEEDS	54	169	50
50 PERCENT EXCEEDS	14	24	12
90 PERCENT EXCEEDS	7.3	8.6	4.9

e Estimated

## VIRGIN RIVER BASIN

173

## 09410100 SANTA CLARA RIVER BELOW WINSOR DAM, NEAR SANTA CLARA, UT

LOCATION.--Lat 37°11'22", long 113°46'02", in NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub> (revised) sec. 28, T. 41 S., R. 17 W., Washington County, Hydrologic Unit 15010008, on right bank 1,100 ft downstream from Winsor Dam, 0.6 mi northwest of Shivwits Indian Village, and 7.5 mi northwest of Santa Clara.

DRAINAGE AREA.--378 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1971 to current year.

REVISED RECORDS.--WRD UT-73-1: 1972(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,210 ft above sea level, from topographic map, prior to Mar. 29, 1988, at several sites upstream and downstream at different datums.

REMARKS.--Records good except those for flows less than 2.0 ft<sup>3</sup>/s, flows in excess of 200 ft<sup>3</sup>/s, and estimated daily discharges, which are poor. Flow regulated by Gunlock Reservoir and several diversions upstream for irrigation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 5,850 ft<sup>3</sup>/s, flood of 1938 (exact date unknown), gage height 7.90 ft, from slope area measurement.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,770 ft<sup>3</sup>/s Mar. 3, 1983, gage height, 6.07 ft from rating curve extended above 980 ft<sup>3</sup>/s on basis of slope-area measurement; no flow several days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,510 ft<sup>3</sup>/s at 0830 hrs, Jan. 18, gage height, 16.71 ft from rating curve extended above 54 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	e.09	11	e1.7	43	66	166	88	79	32	17	3.4
2	14	e.07	5.3	e1.8	42	57	178	77	74	30	17	1.5
3	14	e.06	7.9	e1.8	42	51	156	92	67	26	16	2.2
4	15	e.05	5.6	e1.9	42	51	141	83	62	26	16	2.5
5	15	e.00	9.9	e1.8	42	57	141	67	62	25	14	2.6
6	15	e.00	7.3	e5.0	42	71	141	69	70	23	14	5.1
7	16	e.00	1.7	e8.0	41	106	123	64	79	23	14	10
8	13	e.00	.04	e13	72	156	108	55	66	23	14	8.1
9	9.5	e.06	.68	e8.0	320	171	100	46	56	22	13	6.7
10	8.9	e.39	.26	e9.0	274	176	97	43	49	21	10	8.5
11	6.4	e.21	e.10	e8.0	120	186	96	42	44	21	8.3	11
12	.94	e.17	e.00	e4.0	76	205	94	45	45	22	11	12
13	.45	e.14	e.00	e5.0	58	141	89	71	45	22	12	12
14	.21	e.11	e.21	e4.0	47	127	80	93	46	22	11	13
15	.10	e.05	e.00	e19.0	45	133	64	112	52	18	14	7.6
16	.10	e.08	e.01	85	47	152	61	118	54	18	15	2.1
17	.10	e.11	e.15	485	46	177	63	131	56	17	15	e4.0
18	.09	e.09	e2.2	994	41	260	70	144	50	18	15	4.3
19	.09	e.21	e2.0	281	e150	236	81	131	48	17	15	4.4
20	.10	e.21	e2.2	127	e400	196	75	112	49	16	14	6.9
21	.10	e.40	e2.3	86	e250	190	80	118	47	16	14	7.6
22	.16	27	e2.4	74	e150	203	77	137	44	15	14	11
23	.10	29	e2.5	73	e130	199	89	129	43	17	13	11
24	.15	8.5	e2.6	63	119	237	94	116	44	21	13	10
25	.25	1.3	e2.6	59	104	305	86	103	42	22	14	9.8
26	.20	1.9	e2.7	55	89	314	87	105	41	22	40	11
27	.20	5.7	e3.5	51	93	323	99	110	42	20	12	11
28	.24	5.2	e4.0	46	77	288	97	111	39	17	11	12
29	.29	3.2	e2.0	44	---	240	92	106	40	18	11	12
30	2.1	11	e6.0	44	---	184	99	90	37	18	12	12
31	e29	---	e2.0	44	---	174	---	83	---	18	4.5	---
TOTAL	174.77	95.30	89.15	2784.0	3002	5432	3024	2891	1572	646	433.8	235.3
MEAN	5.64	3.18	2.88	89.8	107	175	101	93.3	52.4	20.8	14.0	7.84
MAX	29	29	11	994	400	323	178	144	79	32	40	13
MIN	.09	.00	.00	1.7	41	51	61	42	37	15	4.5	1.5
AC-FT	347	189	177	5520	5950	10770	6000	5730	3120	1280	860	467

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1993, BY WATER YEAR (WY)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	3.48	5.99	3.60	16.2	36.7	48.9	42.6	36.4	18.1	15.4	10.9										
MAX	27.1	43.6	35.2	158	366	231	169	157	46.2	33.9	29.1										
(WY)	1984	1984	1984	1980	1980	1983	1978	1973	1983	1983	1980										
MIN	.000	.000	.000	.000	.000	.14	6.08	5.06	8.03	.90	.33	.000									
(WY)	1978	1978	1991	1975	1975	1977	1977	1977	1991	1990	1990	1977									

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1973 - 1993

ANNUAL TOTAL	4650.63	20379.32	23.8	
ANNUAL MEAN	12.7	55.8	90.1	1980
HIGHEST ANNUAL MEAN			3.76	1990
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	52	994	1530	Mar 3 1983
LOWEST DAILY MEAN	.00	.00	.00	Oct 8 1972
ANNUAL SEVEN-DAY MINIMUM	.01	.02	.00	Oct 8 1972
ANNUAL RUNOFF (AC-FT)	9220	40420	17240	
10 PERCENT EXCEEDS	39	141	54	
50 PERCENT EXCEEDS	11	22	11	
90 PERCENT EXCEEDS	.08	.21	.00	

e Estimated

## VIRGIN RIVER BASIN

09413000 SANTA CLARA RIVER AT ST. GEORGE, UT

LOCATION.--Lat 37°04'31", long 113°35'32", in SE $\frac{1}{4}$ , SW $\frac{1}{4}$ , NE $\frac{1}{4}$ , sec. 1, T. 43 S., R. 16 W., Washington County, Hydrologic Unit 15010008 on right bank 0.8 mi upstream from mouth and 2 mi south of St. George.

DRAINAGE AREA.--541 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to September 1956, November 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,560 ft above sea level, from topographic map. October 1950 to September 1956, gage located 0.25 mi downstream; November 1984 to September 1989, 0.5 mi downstream from present site, both at different datum.

REMARKS.--Records good except those for estimated daily discharges and flows less than 2.0 ft<sup>3</sup>/s, which are poor, and flows greater than 700 ft<sup>3</sup>/s, which are fair. Flow regulated by reservoirs and many diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,200 ft<sup>3</sup>/s, Aug. 24, 1955, gage height, 10.02 ft from rating curve extended above 400 ft<sup>3</sup>/s on basis of indirect measurements at gage heights 7.31 and 9.48 ft, site and datum then in use; no flow at times in 1951, 1953, 1955-56, 1989, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,460 ft<sup>3</sup>/s at 1700 hours, Jan. 18, gage height, 13.24 ft; minimum daily discharge 1.5 ft<sup>3</sup>/s, Nov. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	6.2	7.3	4.4	e50	118	105	72	69	11	3.8	7.6
2	3.4	2.8	7.8	4.7	e40	110	117	63	65	10	6.2	6.2
3	2.5	2.7	10	4.8	41	112	103	70	59	9.9	3.1	3.5
4	2.6	2.6	11	6.1	36	125	91	85	49	15	4.4	3.4
5	2.9	2.0	9.2	5.3	32	130	89	59	43	10	8.5	5.4
6	2.4	1.7	6.0	6.8	29	119	91	67	47	9.8	8.3	3.9
7	2.8	1.8	5.9	11	29	136	78	58	73	5.2	7.0	3.2
8	3.5	1.8	5.7	29	111	160	66	45	65	5.4	7.1	4.4
9	2.4	1.6	4.7	11	219	162	65	37	46	8.5	4.3	3.5
10	2.3	1.8	5.1	22	e304	175	e68	33	39	5.6	3.6	3.3
11	2.4	6.7	3.4	27	e290	192	e72	34	36	4.8	3.1	2.5
12	2.9	2.3	e4.3	11	e135	210	e77	32	38	3.8	2.8	4.0
13	2.3	3.4	e3.1	11	e55	177	85	53	34	2.6	2.4	4.4
14	1.9	2.5	e3.3	73	e45	173	76	66	29	6.0	2.6	4.0
15	1.7	3.1	3.9	61	e33	164	66	89	34	5.9	4.0	6.3
16	2.1	2.2	4.1	117	e28	169	63	107	36	6.1	e3.2	5.5
17	2.2	1.7	4.8	579	e26	193	61	114	36	3.8	2.9	4.3
18	2.4	1.6	4.8	1170	e26	276	62	136	35	3.9	3.2	4.0
19	2.0	2.0	4.6	749	e68	264	67	130	29	3.5	2.3	4.6
20	1.6	1.5	4.9	285	e687	200	70	110	27	2.8	3.4	4.3
21	1.7	1.9	5.2	109	e350	168	70	103	31	2.5	e3.7	3.9
22	2.4	1.8	5.6	80	e230	178	65	123	26	3.0	3.9	3.9
23	2.5	1.7	5.9	82	e153	165	73	128	27	3.1	3.4	3.9
24	3.2	2.0	6.4	e75	e170	200	71	109	26	3.2	2.9	3.8
25	2.7	3.6	6.7	e70	178	261	64	91	26	3.7	3.3	3.2
26	2.7	4.3	7.1	e65	170	260	57	86	24	4.5	116	4.4
27	2.3	6.2	7.4	e60	143	247	77	87	27	4.7	18	3.1
28	2.5	7.5	13	e55	131	228	73	91	24	5.5	12	3.2
29	2.4	6.2	5.8	e50	---	181	71	85	23	6.1	68	3.1
30	2.2	7.6	22	e60	---	122	69	74	16	4.5	29	3.1
31	226	---	4.7	e70	---	114	---	69	---	2.8	11	---
TOTAL	319.0	94.8	203.7	3964.1	3809	5489	2262	2506	1139	177.2	357.4	123.9
MEAN	10.3	3.16	6.57	128	136	177	75.4	80.8	38.0	5.72	11.5	4.13
MAX	226	7.6	22	1170	687	276	117	136	73	15	116	7.6
MIN	1.6	1.5	3.1	4.4	26	110	57	32	16	2.5	2.3	2.5
AC-FT	633	188	404	7860	7560	10890	4490	4970	2260	351	709	246

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1993, BY WATER YEAR (WY)

	MEAN	2.97	4.23	6.01	14.4	13.9	23.5	20.9	13.1	6.08	3.64	7.62	3.38
MAX	10.3	12.7	14.5	128	136	177	136	80.8	38.0	8.65	38.8	7.10	7.10
(WY)	1993	1953	1953	1993	1993	1993	1952	1993	1955	1955	1955	1985	1985
MIN	.22	.59	.91	.82	.79	1.44	1.50	1.09	.31	.36	.055	.29	.29
(WY)	1991	1991	1992	1991	1991	1991	1991	1990	1990	1990	1956	1953	1953

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1951 - 1993

ANNUAL TOTAL	3531.66	20445.1	
ANNUAL MEAN	9.65	56.0	
HIGHEST ANNUAL MEAN			10.2
LOWEST ANNUAL MEAN			56.0
HIGHEST DAILY MEAN	226	1170	1.18
LOWEST DAILY MEAN	.34	1.5	1993
ANNUAL SEVEN-DAY MINIMUM	.63	1.7	1991
ANNUAL RUNOFF (AC-FT)	7010	40550	1170
10 PERCENT EXCEEDS	33	156	Jan 18
50 PERCENT EXCEEDS	3.2	11	Nov 20
90 PERCENT EXCEEDS	1.1	2.5	Nov 17
			1170
			.00
			.00
			7370
			15
			3.2
			.37

e Estimated

## VIRGIN RIVER BASIN

175

09413200 VIRGIN RIVER NEAR BLOOMINGTON, UT

LOCATION.--Lat 37°04'14", long 113°34'55", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 6, T. 43 S., R. 15 W., Washington County, Hydrologic Unit 15010010, on left bank 0.2 mi downstream from mouth of Santa Clara River, and 0.2 mi upstream from I-15 bridge.

DRAINAGE AREA.--3,994 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1977 to current year.

REVISED RECORD.--WDR-UT-92-1: Drainage area.

GAGE.--Water-stage recorder. Crest-stage gage since May 9, 1989. Elevation of gage is 2,530 ft above sea level, from topographic map, prior to Sept. 19, 1978 at site 1.5 mi downstream at different datum.

REMARKS.--Records fair except those for Mar. 12-30, Aug. 12 to Sept. 4, and estimated daily discharges, which are poor. Diversions for irrigation of about 19,600 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,000 ft<sup>3</sup>/s (estimated on basis of slope conveyance) Jan. 1, 1989, gage height, 25.70 ft, result of Quail Creek reservoir dike failure; minimum daily discharge, 9.5 ft<sup>3</sup>/s Sept. 5, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,390 ft<sup>3</sup>/s, Feb. 20, gage height, 10.76 ft from rating curve, extended above 3,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily discharge, 30 ft<sup>3</sup>/s, Aug. 1-4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	378	85	159	e550	e750	1220	1950	554	115	e30	333
2	51	226	75	159	e440	e550	1380	1710	510	94	e30	226
3	51	203	84	169	e400	e550	1290	1620	458	82	e30	171
4	53	201	84	154	e420	e530	1260	2080	421	85	e30	148
5	e80	194	107	154	e350	513	1290	1470	421	117	e35	e110
6	67	188	109	168	e300	559	1220	1240	704	e120	e38	e90
7	61	203	109	203	e280	679	1070	1190	650	e110	e40	e80
8	72	204	145	1900	e600	780	1020	1320	542	e105	e50	e60
9	69	197	144	621	e2800	837	1080	1090	457	e110	e65	e45
10	60	185	142	344	e1500	835	1170	1110	381	e115	e70	e45
11	77	179	139	516	e800	906	1210	1400	357	e120	e95	e45
12	79	179	154	e280	e600	1050	1400	1590	299	e110	69	e40
13	61	174	150	e250	e500	668	1160	1670	271	e100	45	e40
14	53	149	132	e500	e400	474	1070	1760	280	e100	57	e43
15	60	135	127	e780	e360	505	1040	1780	263	e105	44	e45
16	66	150	136	e620	e360	658	1080	1720	241	e100	43	e55
17	80	146	136	e1600	e350	736	1190	1850	233	e100	50	e80
18	101	119	153	e2500	e400	1090	1410	1830	235	e100	62	e90
19	92	120	152	e1000	e1000	1350	1340	1520	239	e80	57	e90
20	109	117	141	e700	e4000	1110	1240	1420	227	e70	48	e90
21	115	114	140	e540	e2000	1010	1320	1370	232	e60	127	e80
22	119	112	138	e450	e1000	1120	1390	1300	239	e55	117	e70
23	120	113	138	e420	e900	1040	1530	1190	244	e50	83	e65
24	135	100	137	e400	e900	1190	1570	1110	227	e50	76	e55
25	151	99	128	e350	e800	1420	1460	1050	227	e50	61	e50
26	160	93	120	e290	e650	1830	1590	1100	226	e50	270	e60
27	126	102	127	e290	e550	2660	1690	1020	236	e55	109	e65
28	124	101	200	e290	e600	2270	1760	906	208	e50	146	e65
29	135	104	186	e290	---	1700	1790	781	142	e45	151	e70
30	225	92	247	e290	---	1220	1810	713	115	e40	442	e75
31	1770	---	184	e450	---	1170	---	610	---	e35	340	---
TOTAL	4566	4677	4249	16837	23810	31760	40050	42470	9839	2578	2910	2581
MEAN	147	156	137	543	850	1025	1335	1370	328	83.2	93.9	86.0
MAX	1770	378	247	2500	4000	2660	1810	2080	704	120	442	333
MIN	44	92	75	154	280	474	1020	610	115	35	30	40
AC-FT	9060	9280	8430	33400	47230	63000	79440	84240	19520	5110	5770	5120

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1993, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	121	166	179	262	341	431	500	550	196	91.9	109	95.6				
MAX	322	286	350	695	1642	1025	1335	1838	1145	244	246	326				
(WY)	1984	1984	1984	1989	1980	1993	1993	1983	1983	1984	1982	1980				
MIN	44.4	51.4	71.5	64.7	56.1	48.8	47.2	29.5	22.8	20.5	25.1	32.2				
(WY)	1991	1991	1991	1991	1991	1990	1990	1990	1990	1990	1991	1978				

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1978 - 1993
ANNUAL TOTAL	57928	186327	
ANNUAL MEAN	158	510	253
HIGHEST ANNUAL MEAN			628
LOWEST ANNUAL MEAN			61.0
HIGHEST DAILY MEAN	1770	4000	13000
LOWEST DAILY MEAN	16	30	9.5
ANNUAL SEVEN-DAY MINIMUM	22	33	13
ANNUAL RUNOFF (AC-FT)	114900	369600	183300
10 PERCENT EXCEEDS	350	1400	581
50 PERCENT EXCEEDS	120	204	137
90 PERCENT EXCEEDS	29	55	33

e Estimated



## VIRGIN RIVER BASIN

09413500 VIRGIN RIVER NEAR ST. GEORGE, UT

LOCATION.--Lat 37°00'52", long 113°40'47", in NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub> sec. 30, T. 43 S., R. 16 W., Washington County, Hydrologic Unit 15010010, on right bank 8.0 mi southwest of St. George, immediately upstream from Beaver Dam Mountains Wilderness Area.

DRAINAGE AREA.--4,123 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to December 1956, October 1991 to current year.

REVISED RECORDS.--WDR UT-92-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 2,400 ft above sea level, from topographic map. October 1950 to December 1956, gage located about 400 ft downstream at different datum.

REMARKS.--Records poor. Flow regulated by reservoirs and many diversions for irrigation above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 55,000 ft<sup>3</sup>/s (estimated) Jan. 1, 1989, gage height, about 30.0 ft, result of Quail Creek reservoir dike failure.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft<sup>3</sup>/s Aug. 25, 1955, gage height 12.70, site and datum then in use; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,740 ft<sup>3</sup>/s at 1300 hrs, Feb. 20, gage height, 11.03 ft, from rating table extended above 1,200 ft<sup>3</sup>/s on basis of slope-area measurement; minimum daily discharge 18 ft<sup>3</sup>/s, Aug. 2-4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	225	95	e180	525	e700	1020	1680	559	81	e20	e170
2	44	e200	76	e180	422	e600	1140	1570	e480	e70	e18	e140
3	44	e190	85	e180	343	543	1030	1500	405	e70	e18	e120
4	44	e180	99	e180	372	535	1060	1670	351	e75	e18	e110
5	70	e170	109	e180	336	572	1070	1500	352	e80	e20	e90
6	55	e180	110	e180	317	737	1010	1310	592	e90	e21	e75
7	54	e190	117	e280	307	643	894	1350	635	e85	e25	e60
8	68	e190	151	e1500	576	782	864	1300	460	e90	e35	e45
9	70	e180	152	596	e3000	770	873	1150	361	e95	e45	e40
10	62	e165	162	297	e2000	762	938	e1050	303	e105	e55	e40
11	64	161	165	434	e1000	811	989	1170	289	e105	e80	e35
12	e65	155	140	232	e650	831	1160	1430	270	e95	e40	e35
13	59	146	143	188	477	610	1060	1400	214	e95	e35	e30
14	49	129	144	530	450	492	971	1450	263	e95	e45	e30
15	57	131	136	747	422	498	947	e1600	e260	e95	e35	e43
16	62	e140	145	653	384	661	1010	1620	e220	e95	e35	e60
17	74	e140	145	1420	374	784	1010	e1700	218	e90	e40	e65
18	101	135	e140	2430	429	1090	1180	e1700	e240	e80	e55	e70
19	92	116	e160	1430	1170	1260	1240	1400	242	e60	e48	e70
20	103	113	e140	e600	3550	1060	1160	1330	237	e50	e43	e70
21	112	110	e130	e450	e1500	1120	1190	e1350	226	e45	e90	e65
22	115	109	126	e400	e1100	1050	1240	e1300	236	e35	e90	49
23	103	109	137	395	e1000	1110	1330	1260	232	e35	e70	51
24	109	96	e140	359	e940	1170	e1370	1200	206	e35	e60	41
25	133	99	e120	e300	e750	1310	e1300	1130	223	e35	e55	e45
26	140	98	125	e260	e700	1530	1470	1110	210	e35	e180	e50
27	111	104	120	e260	e600	1840	1410	1140	306	e38	e90	e55
28	106	103	175	e260	e650	1870	1510	876	178	e35	e110	e55
29	111	106	211	e260	---	1480	1530	760	88	e30	e140	e60
30	172	102	e250	e260	---	1220	1550	697	76	e27	e400	e65
31	977	---	e190	459	---	1130	---	e600	---	e25	e250	---
TOTAL	3465	4272	4338	16080	24344	29571	34526	40303	8932	2076	2266	1934
MEAN	112	142	140	519	869	954	1151	1300	298	67.0	73.1	64.5
MAX	977	225	250	2430	3550	1870	1550	1700	635	105	400	170
MIN	39	96	76	180	307	492	864	600	76	25	18	30
AC-FT	6870	8470	8600	31890	48290	58650	68480	79940	17720	4120	4490	3840

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-56, 1991-93, BY WATER YEAR (WY)

	54.1	107	146	211	235	285	428	369	67.4	62.2	145	36.6
MEAN	54.1	107	146	211	235	285	428	369	67.4	62.2	145	36.6
MAX	112	151	275	519	869	954	1312	1300	298	123	522	80.3
(WY)	1993	1953	1952	1993	1993	1993	1952	1993	1993	1955	1955	1954
MIN	22.8	65.2	64.5	120	88.1	69.3	38.3	6.86	.000	10.1	4.30	.000
(WY)	1951	1992	1957	1992	1951	1956	1953	1953	1951	1952	1956	1956

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1951-56, 1991-93

ANNUAL TOTAL	57743	172107	180	1993
ANNUAL MEAN	158	472	472	1956
HIGHEST ANNUAL MEAN			73.7	1955
LOWEST ANNUAL MEAN			5490	Aug 25 1955
HIGHEST DAILY MEAN	1030	Mar 4		Apr 17 1951
LOWEST DAILY MEAN	11	Jul 24		May 29 1951
ANNUAL SEVEN-DAY MINIMUM	16	Jun 21		
ANNUAL RUNOFF (AC-FT)	114500		341400	
10 PERCENT EXCEEDS	374		1310	
50 PERCENT EXCEEDS	112		188	
90 PERCENT EXCEEDS	24		45	

e Estimated

## VIRGIN RIVER BASIN

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09413900 BEAVER DAM WASH NEAR ENTERPRISE, UT

LOCATION.--Lat 37°28'12", long 114°02'45", in NW1/4SW1/4NW1/4 sec. 24, T. 38 S., R. 20 W., Washington County, Hydrologic Unit 15010010, on left bank 0.4 mi downstream from Nevada-Utah State line and about 19 mi southwest of Enterprise.

DRAINAGE AREA.--58 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,760 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except those for flows below 2.0 ft<sup>3</sup>/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft<sup>3</sup>/s, Feb. 19, 1993, gage height, 9.56 ft, from rating curve extended above 140 ft<sup>3</sup>/s on basis of slope-area measurement of peak.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 8	0515	70	4.91	Mar. 11	2300	347	5.81
Jan. 18	0230	1,230	9.19	Mar. 17	2345	593	7.74
Feb. 8	1900	884	8.48	Mar. 26	2315	232	6.41
Feb. 19	1900	*1,440	*9.56				

Minimum daily discharge, 0.32 ft<sup>3</sup>/s Aug. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	3.6	3.0	6.6	6.1	70	67	13	4.6	1.8	.86	1.8
2	.53	3.0	3.0	6.8	5.9	72	68	12	4.5	2.0	.79	1.7
3	.61	2.9	3.0	6.4	5.8	71	53	12	3.7	1.8	1.0	1.6
4	.89	2.7	3.0	4.8	5.3	74	49	11	4.1	1.8	1.2	1.3
5	2.0	2.7	3.0	4.5	5.3	78	49	11	4.5	1.6	.79	1.2
6	2.4	2.7	3.5	4.4	5.3	108	50	11	6.0	1.6	1.6	.79
7	2.4	2.8	4.0	5.6	5.4	159	41	10	7.5	1.7	1.8	.55
8	1.9	3.7	4.1	35	309	172	37	9.8	7.9	1.2	1.6	.79
9	1.7	3.8	4.1	18	316	200	37	9.4	7.2	1.2	1.4	.72
10	1.7	3.6	3.9	20	66	202	37	8.6	6.2	1.4	1.7	.79
11	2.1	3.2	3.5	18	23	222	35	8.6	5.8	1.4	1.8	.79
12	2.1	3.2	4.3	14	17	172	34	8.6	4.8	1.5	1.8	.79
13	2.1	3.2	3.3	13	13	88	28	8.6	4.0	1.6	1.6	.86
14	1.9	3.2	2.8	141	10	89	26	8.1	4.4	1.6	1.6	.86
15	1.7	3.0	2.7	76	9.0	112	24	7.9	4.3	1.4	1.2	.93
16	1.6	1.9	2.8	118	7.7	157	23	7.3	4.4	1.4	1.2	1.1
17	1.8	2.2	2.6	287	6.7	232	23	7.7	4.3	1.4	1.2	1.5
18	1.3	2.4	2.6	683	6.3	295	23	7.8	4.2	1.0	1.2	1.2
19	.91	2.7	2.9	92	542	136	23	7.4	4.3	1.2	.66	1.2
20	.82	2.7	2.5	31	939	100	21	7.0	3.9	1.4	.45	1.0
21	.99	2.7	2.6	16	262	104	20	7.0	3.9	1.2	.86	1.1
22	1.3	2.9	2.9	22	153	107	20	6.9	3.6	.60	.45	1.3
23	1.5	3.0	2.7	23	114	94	21	6.2	3.6	.86	.36	1.3
24	2.4	3.0	2.6	11	98	114	18	5.7	3.1	1.1	.32	1.3
25	3.2	3.0	2.7	9.0	81	160	16	5.7	2.3	1.0	.43	1.4
26	3.0	3.0	2.7	8.1	74	135	16	6.0	1.6	1.1	.79	1.3
27	3.0	3.0	2.7	8.1	74	149	16	5.9	1.7	1.1	1.0	1.2
28	2.8	3.2	3.5	8.1	73	93	15	5.7	1.6	1.1	1.3	1.2
29	2.8	3.1	7.6	8.0	---	71	14	5.3	1.9	1.2	.86	1.3
30	3.0	3.0	12	7.0	---	64	14	4.3	2.0	1.3	1.0	1.3
31	3.7	---	8.1	6.5	---	63	---	4.1	---	1.2	1.5	---
TOTAL	58.91	89.1	114.7	1711.9	3232.8	3963	918	249.6	125.9	41.76	34.32	34.17
MEAN	1.90	2.97	3.70	55.2	115	128	30.6	8.05	4.20	1.35	1.11	1.14
MAX	3.7	3.8	12	683	939	295	68	13	7.9	2.0	1.8	1.8
MIN	.53	1.9	2.5	4.4	5.3	63	14	4.1	1.6	.60	.32	.55
AC-FT	117	177	228	3400	6410	7860	1820	495	250	83	68	68

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993	1992	1993
MEAN	2.12	2.84	3.06	29.7	70.1	92.9	25.7	6.53	2.93	1.15	1.27	1.34
MAX	2.34	2.97	3.70	55.2	115	128	30.6	8.05	4.20	1.35	1.43	1.55
(WY)	1992	1993	1993	1993	1993	1993	1993	1993	1993	1993	1992	1992
MIN	1.90	2.71	2.43	4.11	26.4	58.0	20.9	5.01	1.65	.95	1.11	1.14
(WY)	1993	1992	1992	1992	1992	1992	1992	1992	1992	1992	1993	1993

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1992 - 1993

ANNUAL TOTAL	3905.06	10574.16	19.8	
ANNUAL MEAN	10.7	29.0	29.0	
HIGHEST ANNUAL MEAN			10.6	1993
LOWEST ANNUAL MEAN				1992
HIGHEST DAILY MEAN	189	Mar 4	939	Feb 20 1993
LOWEST DAILY MEAN	.36	Jun 29	.32	Aug 24 1993
ANNUAL SEVEN-DAY MINIMUM	.49	Jun 28	.50	Aug 19 1992
ANNUAL RUNOFF (AC-FT)	7750	20970	14320	
10 PERCENT EXCEEDS	31	84	54	
50 PERCENT EXCEEDS	3.0	3.7	3.0	
90 PERCENT EXCEEDS	.86	1.0	1.0	

## VIRGIN RIVER BASIN

09414900 BEAVER DAM WASH AT BEAVER DAM, AZ

LOCATION.--Lat. 36°54'07", long 113°55'58", in NW¼, NE¼, NE¼, sec. 5, T. 40 N., R. 15 W., Mohave County,  
Hydrologic Unit 15010010, on downstream end of bridge pier at Beaver Dam, AZ.

DRAINAGE.--575 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1993 to September 1993.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,850 ft above sea level, from  
bench mark on bridge.

REMARKS.--Records poor. Results of discharge measurements in ft<sup>3</sup>/s made during 1993 water year before  
recording gage was installed are given herewith:

Dec. 19	a 0.30	Jan. 18	2,160
Jan. 12	a 2.0	Jan. 19	143
Jan. 15	211	Jan. 24	a 2.5

a estimate

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 5,940 ft<sup>3</sup>/s at 0130 hrs on Feb. 10, 1993, gage height,  
7.14 ft, from rating curve extended above 2,200 ft<sup>3</sup>/s; minimum daily discharge 0.76 ft<sup>3</sup>/s, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	5.9	44	2.8	2.1	3.5	2.6	1.2
2	---	---	---	---	---	5.5	38	2.9	1.3	3.5	2.5	1.1
3	---	---	---	---	---	5.8	29	3.0	1.2	3.1	1.8	.79
4	---	---	---	---	---	4.7	22	3.3	1.3	3.2	2.0	.80
5	---	---	---	---	---	2.8	20	3.2	1.8	3.0	2.0	.78
6	---	---	---	---	2.5	2.6	19	3.5	1.8	3.0	3.1	.76
7	---	---	---	---	1.8	5.7	11	3.4	1.7	2.8	4.8	.82
8	---	---	---	---	12	6.1	7.9	3.3	1.6	2.0	4.7	.89
9	---	---	---	---	1730	5.3	7.0	3.2	2.0	2.0	3.4	.92
10	---	---	---	---	786	6.6	6.5	3.4	2.0	2.4	3.4	.93
11	---	---	---	---	22	6.5	6.4	3.5	2.3	1.9	2.5	.95
12	---	---	---	---	3.6	9.1	5.7	3.2	2.3	1.8	2.5	.92
13	---	---	---	---	3.2	6.5	3.6	3.2	2.4	1.8	2.4	.89
14	---	---	---	---	2.2	4.8	3.2	3.0	2.8	1.8	2.3	.92
15	---	---	---	---	.52	4.5	3.4	3.1	2.6	2.0	2.4	1.0
16	---	---	---	---	.25	4.2	3.3	3.2	2.8	2.2	2.3	1.1
17	---	---	---	---	.13	5.2	3.7	3.2	1.7	2.5	2.3	1.1
18	---	---	---	---	.11	17	4.0	3.2	2.0	2.1	2.3	1.1
19	---	---	---	---	308	31	3.8	3.0	2.4	2.1	2.2	1.2
20	---	---	---	---	1020	27	3.5	3.0	2.4	1.8	2.3	1.2
21	---	---	---	---	53	20	3.8	2.9	2.6	2.0	2.5	1.1
22	---	---	---	---	9.8	23	4.0	2.9	2.6	2.7	2.6	1.0
23	---	---	---	---	5.4	21	3.7	2.7	2.5	3.4	2.5	1.0
24	---	---	---	---	7.0	23	3.3	2.6	2.8	3.2	2.2	1.0
25	---	---	---	---	7.6	30	3.4	2.8	2.5	3.3	e2.0	1.1
26	---	---	---	---	5.6	101	3.9	2.3	2.9	3.0	e10	.97
27	---	---	---	---	9.5	159	3.4	2.1	3.1	2.8	e2.0	1.0
28	---	---	---	---	8.0	163	2.7	2.1	3.0	2.7	e1.8	1.3
29	---	---	---	---	---	107	2.8	2.1	3.5	3.7	e1.5	2.4
30	---	---	---	---	---	55	3.0	2.2	3.4	3.3	2.9	3.0
31	---	---	---	---	---	65	---	2.4	---	2.6	1.3	---
TOTAL	---	---	---	---	---	933.8	279.2	90.2	69.4	81.3	85.1	33.24
MEAN	---	---	---	---	---	30.1	9.31	2.91	2.31	2.62	2.75	1.11
MAX	---	---	---	---	---	163	44	3.5	3.5	3.7	10	3.0
MIN	---	---	---	---	---	2.6	2.7	2.1	1.2	1.8	1.3	.76
AC-FT	---	---	---	---	---	1850	554	179	138	161	169	66

e Estimated

## GREAT BASIN

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## GREAT SALT LAKE BASIN

## 10010000 GREAT SALT LAKE AT STATE PARK SALT LAKE BEACH BOAT HARBOR, UT

LOCATION (REVISED).--Lat 40 43'53", long 112 12'46", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 17, T. 1 S., R. 3 W., Salt Lake County, Hydrologic Unit 16020310, at State Park Salt Lake Beach Boat Harbor on southeast shore of lake, 17.1 mi west of Salt Lake City. (Gage temporarily located 0.4 mi to the southeast, from Apr. 13, 1984 to May 30, 1985, because of problems associated with highwater, then relocated 0.1 mi to the northeast from May 30, 1985 to Aug. 9, 1989 because of highway construction. Gage relocated to boat harbor marina on Aug. 9, 1989).

PERIOD OF RECORD.--September 1875 to December 1899, October 1902 to current year. Records for October 1902 to September 1912 and diagram showing fluctuations of lake from 1851-1950, published in WSP 1314.

REVISED RECORDS.--WSP 1314: 1877. WRD-UT-74-1: 1967-73. WDR-UT-83-1: 1981-82.

GAGE.--Water-stage recorder at Boat Harbor since October 1938. Datum at gage since September 15, 1970 is 4,186.80 ft above sea level. October 1938 to April 15, 1967, at datum 4,186.9 ft and April 15, 1967 to September 15, 1970, at datum 4,186.85 ft. Prior to October 1938, staff gages at sites and datums as follows: September 1875 to October 1877 at Black Rock at 4,208.4 ft above sea level, November 1877 to November 1879 at Farmington Bay at 4,206.9 ft above sea level, November 1879 to April 1881 near Black Rock at 4,203.1 ft above sea level, April 1881 to December 1899 at Garfield Landing at 4,198.5 ft above sea level, October 1902 to July 1903, at Midlake on Lucin cutoff of Southern Pacific Railroad, 30 mi west of Ogden, at 4,197.9 ft above sea level, and July 1903 to October 1938 at Salt Lake at 4,196.9 ft above sea level.

REMARKS.--Wind effects may cause substantial changes in elevations, which are not shown in the published elevations. Specific gravity and temperature were collected from water surface near the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 4,211.85 ft June 3, 1986, Mar. 30-Apr. 6, 1987; minimum, 4,191.35 ft Oct. 15, Nov. 1, 1963. Maximum elevation prior to June 3, 1986, 4,211.6 ft in 1873, computed from traditional data by G. K. Gilbert and E. C. LaRue.

Date	Temperature, water (Deg. C)	Specific Gravity (20.0°C)	Percent Salinity
Oct. 1, 1992 . . . .	22.0	1.112	16.0
Mar. 8, 1993 . . . .	8.0	1.106	15.2
Apr. 8 . . . . .	13.0	1.102	14.7
June 7 . . . . .	15.0	1.107	15.3
Aug. 9 . . . . .	26.0	1.100	14.5

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4199.9	4199.7	4199.7	4200.0	4200.3	4200.7	4201.3	4201.4	4201.8	4201.9	4201.5	4201.0
2	4199.8	4200.1	4199.8	4200.1	4200.3	4200.7	4201.4	4201.4	4201.8	4202.0	4201.5	4201.1
3	4199.9	4199.9	4199.8	4200.0	4200.3	4200.7	4201.3	4201.5	4201.8	4201.9	4201.5	4201.0
4	4199.8	4199.7	4199.8	4200.0	4200.3	4200.7	4201.3	4201.4	4201.7	4201.9	4201.5	4201.0
5	4199.8	4199.7	4199.8	4200.0	4200.3	4200.7	4201.3	4201.5	4201.7	4201.8	4201.5	4201.0
6	4199.9	4199.7	4199.7	4200.0	4200.4	4200.7	4201.5	4201.5	4201.7	4201.8	4201.4	4201.0
7	4199.8	4199.8	4199.7	4200.0	4200.4	4200.7	4201.4	4201.6	4201.8	4201.8	4201.5	4201.0
8	4199.7	4199.8	4199.8	4200.1	4200.4	4200.7	4201.3	4201.6	4201.8	4201.8	4201.4	4201.0
9	4199.8	4199.8	4199.8	4200.1	4200.4	4200.8	4201.4	4201.6	4201.8	4201.8	4201.4	4201.0
10	4199.7	4199.8	4199.8	4200.1	4200.4	4200.8	4201.4	4201.6	4201.9	4201.8	4201.4	4201.0
11	4199.7	4199.7	4199.8	4200.2	4200.4	4200.9	4201.4	4201.6	4202.0	4201.8	4201.5	4200.9
12	4199.7	4199.7	4200.0	4200.1	4200.4	4200.9	4201.4	4201.6	4202.0	4201.8	4201.5	4201.1
13	4199.7	4199.7	4200.0	4200.2	4200.5	4200.8	4201.4	4201.6	4201.9	4201.8	4201.4	4201.0
14	4199.7	4199.7	4199.8	4200.2	4200.5	4200.9	4201.3	4201.6	4201.9	4201.7	4201.4	4200.8
15	4199.7	4199.7	4199.9	4200.2	4200.5	4200.9	4201.4	4201.7	4202.0	4201.8	4201.2	4200.8
16	4199.7	4199.7	4199.8	4200.2	4200.5	4200.9	4201.4	4201.7	4202.1	4201.7	4201.4	4200.8
17	4199.7	4199.7	4199.8	4200.2	4200.5	4200.9	4201.4	4201.7	4202.0	4201.6	4201.3	4200.9
18	4199.7	4199.7	4199.9	4200.2	4200.5	4201.0	4201.7	4201.7	4201.9	4201.7	4201.3	4200.9
19	4199.7	4199.7	4199.8	4200.2	4200.5	4201.0	4201.4	4201.7	4201.9	4201.6	4201.2	4200.8
20	4199.7	4200.0	4199.8	4200.3	4200.6	4201.0	4201.4	4201.7	4201.9	4201.6	4201.2	4200.8
21	4199.7	4199.7	4199.8	4200.3	4200.6	4201.1	4201.4	4201.7	4201.9	4201.6	4201.3	4200.9
22	4199.7	4199.8	4199.8	4200.3	4200.6	4201.1	4201.4	4201.7	4202.0	4201.5	4201.2	4200.9
23	4199.7	4199.9	4199.8	4200.3	4200.6	4201.1	4201.5	4201.8	4202.0	4201.5	4201.2	4200.9
24	4199.7	4199.8	4199.9	4200.3	4200.6	4201.0	4201.4	4201.8	4201.9	4201.6	4201.3	4200.8
25	4199.7	4199.7	4199.9	4200.3	4200.7	4201.1	4201.4	4201.8	4201.9	4201.5	4201.3	4200.8
26	4199.6	4199.7	4199.9	4200.3	4200.7	4201.1	4201.5	4201.8	4201.9	4201.6	4201.2	4200.8
27	4199.7	4199.7	4199.9	4200.3	4200.7	4201.2	4201.4	4201.8	4201.9	4201.6	4201.2	4200.8
28	4199.6	4199.7	4199.9	4200.3	4200.7	4201.2	4201.4	4201.7	4201.9	4201.6	4201.1	4200.8
29	4199.7	4199.7	4199.8	4200.3	---	4201.2	4201.4	4201.8	4202.0	4201.5	4201.2	4200.8
30	4199.8	4199.7	4199.9	4200.3	---	4201.3	4201.5	4201.8	4201.9	4201.5	4201.1	4200.7
31	4199.8	---	4200.0	4200.3	---	4201.3	---	4201.8	---	4201.5	4201.1	---
MEAN	4199.7	4199.8	4199.8	4200.2	4200.5	4200.9	4201.4	4201.7	4201.9	4201.7	4201.3	4200.9
MAX	4199.9	4200.1	4200.0	4200.3	4200.7	4201.3	4201.7	4201.8	4202.1	4202.0	4201.5	4201.1
MIN	4199.6	4199.7	4199.7	4200.0	4200.3	4200.7	4201.3	4201.4	4201.7	4201.5	4201.1	4200.7

WTR YR 1993 MEAN 4200.8 MAX 4202.1 MIN 4199.6

## GREAT SALT LAKE BASIN

10010100 GREAT SALT LAKE NEAR SALINE, UT

LOCATION.--Lat 41°15'09", long 112°29'40", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 14, T. 6 N., R. 6 W., Box Elder County, Hydrologic Unit 16020310, 3.4 mi northwest of Saline at the Little Valley boat harbor, 30 mi west of Ogden and 27 mi south of Promontory.

PERIOD OF RECORD.--April 1966 to current year.

REVISED RECORDS.--WDR UT-75-1: 1966-75. WDR UT-83-1: 1966-82, gage datum.

GAGE.--Water-stage recorder on pier of boat harbor. Datum of gage, 4,189.80 ft above sea level.

REMARKS.--Wind effects may cause substantial changes in elevations, which are not shown in the published elevations. Samples for specific gravity and temperature were collected from water surface near the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 4,210.95 ft Apr. 7-29, 1987; minimum, 4,192.65 ft Oct. 15, Nov. 1, 1966.

Date	Temperature, water (Deg. C)	Specific Gravity (20.0°C)	Percent Salinity
Oct. 1, 1992 . . . .	21.0	1.213	27.9
Dec. 16 . . . . .	24.0	1.216	28.3
Apr. 8, 1993 . . . .	13.5	1.208	27.2
June 7 . . . . .	15.0	1.211	27.5
Aug. 11 . . . . .	25.0	1.208	27.5

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4197.3	4197.2	4197.0	4197.0	4197.2	4197.4	4197.4	4197.4	4197.2	4197.1	4196.7	4196.4
2	4197.5	4197.6	4197.0	4197.1	4197.2	4197.4	4197.2	4197.4	4197.3	4197.2	4196.7	4196.4
3	4197.1	4197.3	4197.1	4197.1	4197.2	4197.4	4197.3	4197.4	4197.4	4197.1	4196.7	4196.3
4	4196.9	4197.1	4197.0	4197.0	4197.2	4197.4	4197.3	4197.4	4197.2	4197.0	4196.7	4196.4
5	4196.9	4197.1	4197.0	4197.0	4197.2	4197.4	4197.3	4197.4	4197.1	4196.9	4196.7	4196.3
6	4196.9	4197.1	4197.0	4197.0	4197.2	4197.4	4197.3	4197.4	4197.2	4197.0	4196.7	4196.3
7	4196.9	4197.2	4197.0	4197.0	4197.2	4197.4	4197.3	4197.5	4197.4	4197.0	4196.7	4196.4
8	4196.9	4197.1	4197.0	4197.1	4197.2	4197.4	4197.4	4197.5	4197.2	4196.9	4196.6	4196.3
9	4196.9	4197.2	4196.9	4197.0	4197.3	4197.4	4197.5	4197.4	4197.2	4196.9	4196.6	4196.3
10	4196.9	4197.2	4197.0	4197.1	4197.3	4197.4	4197.5	4197.4	4197.2	4196.9	4196.5	4196.3
11	4196.9	4197.1	4197.0	4197.2	4197.3	4197.5	4197.5	4197.4	4197.3	4196.9	4196.7	4196.3
12	4196.9	4197.1	4197.2	4197.2	4197.3	4197.4	4197.5	4197.4	4197.3	4197.0	4196.6	4196.4
13	4196.9	4197.1	4197.2	4197.1	4197.3	4197.4	4197.5	4197.4	4197.3	4196.9	4196.7	4196.4
14	4196.9	4197.1	4197.0	4197.2	4197.3	4197.4	4197.4	4197.4	4197.3	4196.9	4196.6	4196.2
15	4197.1	4197.1	4197.0	4197.2	4197.3	4197.4	4197.4	4197.4	4197.3	4197.0	4196.5	4196.2
16	4197.1	4197.1	4197.0	4197.1	4197.4	4197.4	4197.4	4197.4	4197.4	4196.9	4196.7	4196.2
17	4197.1	4197.1	4197.0	4197.1	4197.3	4197.4	4197.4	4197.4	4197.3	4196.9	4196.6	4196.2
18	4197.1	4197.1	4197.0	4197.2	4197.3	4197.4	4197.8	4197.4	4197.2	4196.8	4196.5	4196.3
19	4197.1	4197.1	4197.0	4197.2	4197.3	4197.4	4197.5	4197.4	4197.2	4196.8	4196.4	4196.2
20	4197.1	4197.2	4197.0	4197.2	4197.3	4197.5	4197.4	4197.3	4197.2	4196.8	4196.4	4196.2
21	4197.1	4197.1	4197.0	4197.2	4197.3	4197.5	4197.4	4197.4	4197.1	4196.8	4196.5	4196.3
22	4197.1	4197.1	4197.0	4197.5	4197.3	4197.5	4197.5	4197.4	4197.2	4196.7	4196.5	4196.3
23	4197.1	4197.2	4197.0	4197.2	4197.3	4197.5	4197.5	4197.3	4197.3	4196.7	4196.5	4196.3
24	4197.1	4197.1	4197.0	4197.2	4197.3	4197.4	4197.5	4197.3	4197.1	4196.8	4196.6	4196.2
25	4197.1	4197.0	4197.0	4197.2	4197.5	4197.4	4197.4	4197.2	4197.1	4196.7	4196.6	4196.1
26	4197.1	4197.0	4197.0	4197.2	4197.4	4197.4	4197.5	4197.3	4197.1	4196.8	4196.5	4196.2
27	4197.1	4197.0	4197.0	4197.2	4197.4	4197.6	4197.5	4197.3	4197.1	4196.7	4196.5	4196.1
28	4197.1	4197.0	4196.9	4197.2	4197.4	4197.6	4197.4	4197.2	4197.1	4196.7	4196.4	4196.2
29	4197.1	4197.0	4196.9	4197.2	---	4197.5	4197.4	4197.3	4197.1	4196.6	4196.5	4196.2
30	4197.1	4197.0	4197.0	4197.2	---	4197.5	4197.4	4197.3	4197.1	4196.7	4196.4	4196.2
31	4197.2	---	4197.0	4197.2	---	4197.4	---	4197.2	---	4196.8	4196.4	---
MEAN	4197.1	4197.1	4197.0	4197.1	4197.3	4197.4	4197.4	4197.4	4197.2	4196.9	4196.6	4196.3
MAX	4197.5	4197.6	4197.2	4197.5	4197.5	4197.6	4197.8	4197.5	4197.4	4197.2	4196.7	4196.4
MIN	4196.9	4197.0	4196.9	4197.0	4197.2	4197.4	4197.2	4197.2	4197.1	4196.6	4196.4	4196.1

WTR YR 1993 MEAN 4197.1 MAX 4197.8 MIN 4196.1

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LOCATION.--Lat 40°57'55", long 110°51'10", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 3 N., R. 10 E., Summit County, Utah  
Hydrologic Unit 16010101, on left bank 400 ft downstream from West Fork and 2.8 mi upstream from Utah-Wyoming  
State line.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated slightly by Whitney Reservoir, total capacity, 4,700 acre-ft since 1966. Three diversions above station for irrigation of about 265 acres above and 2,600 acres below station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and maximum (\*):

Minimum daily discharge, 23 ft<sup>3</sup>/s, Feb. 13, 14.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	51	e43	e30	e29	e26	50	125	1490	755	219	77
2	35	52	e43	e30	e28	e27	55	139	1360	750	203	74
3	36	45	e40	e28	e28	e28	50	183	1150	775	189	70
4	38	47	e37	e25	e26	e29	54	276	827	632	188	71
5	37	52	e39	e30	e24	e30	57	208	766	507	186	75
6	37	50	e39	e33	e25	e32	53	170	727	433	172	73
7	38	49	e42	e35	e26	e34	50	158	590	401	166	68
8	37	49	e45	e33	e26	e35	49	143	527	393	182	57
9	37	42	e45	e31	e27	e35	56	132	469	380	175	55
10	35	38	e45	e28	e26	e35	56	161	508	373	163	53
11	35	77	e44	e27	e25	e34	56	247	690	392	181	52
12	34	53	e42	e27	e24	e33	53	344	878	391	160	75
13	34	48	e40	e31	e23	e34	52	456	961	384	142	119
14	34	47	e40	e33	e23	e34	50	618	1090	350	146	121
15	33	47	e40	e33	e24	e34	53	752	1430	322	137	117
16	32	45	e40	e32	e24	e34	54	936	1500	304	130	118
17	33	44	e41	e32	e25	e35	54	1050	1320	281	122	126
18	33	43	e41	e32	e27	37	68	1210	1050	264	116	131
19	34	43	e40	e31	e26	37	59	1360	988	248	117	124
20	34	41	e39	e35	e26	36	55	1430	1160	235	116	102
21	33	40	e38	e32	e26	40	63	1680	1350	228	129	98
22	36	47	e38	e30	e26	37	82	1890	1290	237	114	97
23	38	44	e39	e29	e26	43	99	1470	1160	357	105	95
24	35	e42	e39	e29	e26	49	89	1440	916	488	98	94
25	36	e40	e39	e29	e25	53	82	1530	861	297	93	93
26	41	e40	e42	e28	e24	54	105	1860	915	373	100	84
27	39	e42	e44	e27	e24	55	127	1860	952	339	92	61
28	53	e42	e38	e27	e25	55	138	1640	970	265	89	59
29	53	e38	e39	e27	---	51	150	1510	936	239	83	58
30	54	e39	e39	e27	---	49	142	1460	845	247	80	57
31	56	---	e36	e28	---	46	---	1460	---	231	79	---
TOTAL	1175	1377	1256	929	714	1191	2161	27898	29676	11871	4272	2554
MEAN	37.9	45.9	40.5	30.0	25.5	38.4	72.0	900	989	383	138	85.1
MAX	56	77	45	35	29	55	150	1890	1500	775	219	131
MIN	32	38	36	25	23	26	49	125	469	228	79	52
AC-FT	2330	2730	2490	1840	1420	2360	4290	55340	58860	23550	8470	5075

MEAN	62.2	54.0	46.5	41.6	40.0	43.0	112	597	862	294	94.0	72.1
MAX	208	106	94.9	72.4	64.3	69.0	316	1044	933	244	229	
(WY)	1983	1984	1984	1984	1984	1986	1946	1984	1986	1975	1965	1983
MIN	30.8	32.5	27.7	29.6	25.3	26.0	37.2	162	204	67.4	37.5	23.9
(WY)	1959	1955	1960	1991	1964	1964	1944	1977	1992	1961	1954	1956

ANNUAL TOTAL		40413		85074							
ANNUAL MEAN		110		233				193			
HIGHEST ANNUAL MEAN								335			1986
LOWEST ANNUAL MEAN								81.5			1977
HIGHEST DAILY MEAN								2680			Jun 4 1986
LOWEST DAILY MEAN	882	May 20		1890	May 22						
ANNUAL SEVEN-DAY MINIMUM	27	Feb 20		23	Feb 13			18			Jan 3 1960
ANNUAL RUNOFF (AC-FT)	31	Feb 16		24	Feb 11			21			Dec 28 1959
10 PERCENT EXCEEDS	80160			168700				140100			
50 PERCENT EXCEEDS	318			868				610			
90 PERCENT EXCEEDS	47			53				58			
	35			28				33			

e Estimated



## BEAR RIVER BASIN

10015700 SULPHUR CREEK ABOVE RESERVOIR, BELOW LA CHAPELLE CREEK, NEAR EVANSTON, WY

LOCATION.--Lat 41°07'45", long 110°48'21", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 13 N., R. 119 W., Uinta County, Hydrologic Unit 16010101, on right bank 0.2 mi downstream from La Chapelle Creek, 3.3 mi upstream from Sulphur Creek Dam, and 12.8 mi southeast of Evanston.

DRAINAGE AREA.--64.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1957 to current year. Monthly discharge only for October and November 1957, published in WSP 1734. October 1957 to October 1987 not equivalent because of inflow between sites. October 1987 to October 1989 at present site at different datum.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,240 ft above sea level, from topographic map. Prior to October 7, 1987 at site 1.3 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft<sup>3</sup>/s June 1, 1983, gage height, 9.10 ft, from rating curve extended above 1,200 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow. Flood was result of released water from temporary blockage of upstream road culverts; no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 732 ft<sup>3</sup>/s May 22, gage height, 8.18 ft; minimum daily discharge, 0.14 ft<sup>3</sup>/s, Oct. 16-18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	1.4	4.7	4.4	e3.3	3.6	55	47	58	13	5.9	2.8
2	.22	1.5	4.9	4.4	e3.5	3.7	53	46	53	10	4.3	2.3
3	.24	.98	6.6	4.4	e3.5	3.9	49	50	73	22	3.3	1.9
4	.30	e.96	5.2	4.4	3.9	3.9	64	104	55	23	5.2	1.4
5	.30	e.96	3.7	4.4	3.9	3.9	70	100	47	31	11	1.4
6	.34	e1.0	3.5	4.4	3.9	3.9	54	150	43	23	12	1.4
7	e.34	e1.1	3.2	4.2	3.8	3.9	42	186	36	16	10	1.3
8	e.32	e1.2	4.9	4.1	3.6	3.6	45	97	33	15	7.9	1.2
9	e.30	e1.4	5.3	4.1	3.6	7.5	65	72	33	10	6.5	1.1
10	e.28	e1.3	4.3	4.1	3.6	10	85	66	27	6.4	5.4	1.2
11	e.26	e1.5	7.3	4.1	3.6	7.7	56	90	33	7.0	5.7	1.1
12	e.24	e1.8	7.7	4.1	3.6	6.9	41	112	36	7.0	6.7	.95
13	e.22	e1.7	6.7	4.1	3.6	6.4	32	153	36	4.7	5.1	1.0
14	e.20	e1.6	7.9	4.1	3.6	6.0	33	227	32	6.4	3.5	1.2
15	e.18	e1.8	6.2	4.4	3.6	6.2	36	241	31	5.4	3.2	1.3
16	.14	e1.9	e7.2	4.4	3.6	6.4	40	249	32	4.2	3.1	1.3
17	.14	e2.1	e6.6	4.4	3.5	6.6	57	261	31	4.4	2.7	1.5
18	.14	e2.2	5.9	4.4	3.4	5.9	60	242	36	3.2	2.7	1.6
19	.15	e2.0	5.9	4.4	3.5	7.5	53	251	30	1.5	2.5	1.8
20	.17	2.1	5.9	4.4	3.4	14	48	259	26	1.5	3.1	1.7
21	.17	3.1	5.6	4.4	3.4	e30	60	266	33	1.5	3.9	1.5
22	.17	2.6	5.5	4.4	3.4	e50	80	394	31	2.1	3.5	1.4
23	.17	1.8	5.3	4.2	3.4	e47	84	182	24	8.8	3.0	1.4
24	.17	2.7	5.3	4.1	3.4	e45	56	184	18	28	2.4	1.4
25	.17	5.0	5.3	3.7	3.4	e38	48	165	16	22	2.2	1.3
26	.17	4.5	5.0	3.6	3.4	e39	61	142	11	83	2.3	1.3
27	.18	6.1	5.0	3.6	3.4	e42	80	122	13	36	2.3	1.4
28	.35	6.6	4.8	3.6	3.6	e50	60	90	17	20	2.4	1.3
29	.36	6.5	4.6	e3.3	---	e54	59	78	18	15	2.3	1.3
30	.74	4.3	4.4	e3.2	---	e55	54	73	17	13	2.4	1.7
31	1.4	---	4.4	e3.2	---	53	---	65	---	9.4	2.8	---
TOTAL	8.72	73.70	168.8	127.0	99.4	624.5	1680	4764	979	453.5	139.3	43.45
MEAN	.28	2.46	5.45	4.10	3.55	20.1	56.0	154	32.6	14.6	4.49	1.45
MAX	1.4	6.6	7.9	4.4	3.9	55	85	394	73	83	12	2.8
MIN	.14	.96	3.2	3.2	3.3	3.6	32	46	11	1.5	2.2	.95
AC-FT	17	146	335	252	197	1240	3330	9450	1940	900	276	86

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1993, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1988	1989	1990	1991	1992	1993
MEAN	1.43	3.50	3.08	2.57	2.53	21.1	38.9	53.3	21.8	4.79	1.86	.65
MAX	6.77	11.8	6.31	4.10	4.18	52.7	64.6	154	33.0	14.6	6.03	2.12
(WY)	1992	1992	1992	1993	1993	1989	1988	1993	1991	1993	1991	1991
MIN	.18	.59	1.17	1.11	1.18	2.80	17.3	11.4	4.20	.18	.017	.000
(WY)	1991	1991	1991	1991	1991	1991	1992	1992	1988	1988	1988	1988

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1988 - 1993

ANNUAL TOTAL	2393.42	9161.37	13.0	1993
ANNUAL MEAN	6.54	25.1	25.1	1990
HIGHEST ANNUAL MEAN			7.09	1990
LOWEST ANNUAL MEAN				1993
HIGHEST DAILY MEAN	57	Mar 27	394	May 22
LOWEST DAILY MEAN	.03	Aug 29	.14	Oct 16
ANNUAL SEVEN-DAY MINIMUM	.04	Aug 24	.15	Oct 16
ANNUAL RUNOFF (AC-FT)	4750	18170	9420	Jul 15 1988
10 PERCENT EXCEEDS	19	64	40	Jul 15 1988
50 PERCENT EXCEEDS	3.4	4.4	2.9	
90 PERCENT EXCEEDS	.14	1.1	.08	

e Estimated

BEAR RIVER BASIN

183

10016900 BEAR RIVER AT EVANSTON, WY

LOCATION.--Lat 41°16'13", long 110°57'47", in NE1/4NW1/4 sec.21, T.15 N., R.120 W., Uinta County, Hydrologic Unit 16010101, on left bank 100 ft downstream from bridge on State Highway 89, in the City of Evanston.

DRAINAGE AREA.--433 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1984 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Results of discharge measurements, in cubic feet per second, made during the period when the station was not in operation, are given below:

Oct. 20 . . . 4.72  
Mar. 17 . . . 97.2  
Mar. 30 . . . 321

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	361	272	1600	622	120	79
2	---	---	---	---	---	---	391	239	1360	557	109	78
3	---	---	---	---	---	---	344	265	1270	637	90	74
4	---	---	---	---	---	---	366	538	998	581	88	66
5	---	---	---	---	---	---	427	554	1040	558	122	44
6	---	---	---	---	---	---	345	574	1020	454	110	44
7	---	---	---	---	---	---	283	778	823	374	99	42
8	---	---	---	---	---	---	265	509	785	290	111	42
9	---	---	---	---	---	---	321	425	690	256	124	39
10	---	---	---	---	---	---	358	425	610	238	114	37
11	---	---	---	---	---	---	351	485	725	230	127	35
12	---	---	---	---	---	---	310	611	875	236	130	33
13	---	---	---	---	---	---	282	757	902	222	107	38
14	---	---	---	---	---	---	265	943	1000	202	88	51
15	---	---	---	---	---	---	268	1160	1230	174	84	53
16	---	---	---	---	---	---	286	1380	1380	156	80	51
17	---	---	---	---	---	---	313	1550	1320	142	74	52
18	---	---	---	---	---	---	321	1630	1190	126	67	55
19	---	---	---	---	---	---	234	1820	1040	112	63	62
20	---	---	---	---	---	---	229	1850	1080	94	69	63
21	---	---	---	---	---	---	213	1920	1290	78	81	55
22	---	---	---	---	---	---	236	2370	1310	108	80	50
23	---	---	---	---	---	---	363	1730	1250	128	64	49
24	---	---	---	---	---	---	320	1950	992	400	53	46
25	---	---	---	---	---	---	280	1870	852	302	40	45
26	---	---	---	---	---	---	279	2120	841	521	43	44
27	---	---	---	---	---	---	358	2220	843	676	37	42
28	---	---	---	---	---	---	316	1980	823	380	78	38
29	---	---	---	---	---	---	304	1810	765	249	80	35
30	---	---	---	---	---	---	309	1650	695	155	80	33
31	---	---	---	---	---	---	---	1660	---	130	79	---
TOTAL	---	---	---	---	---	---	9298	38045	30599	9388	2691	1475
MEAN	---	---	---	---	---	---	310	1227	1020	303	86.8	49.2
MAX	---	---	---	---	---	---	427	2370	1600	676	130	79
MIN	---	---	---	---	---	---	213	239	610	78	37	33
AC-FT	---	---	---	---	---	---	18440	75460	60690	18620	5340	2930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1993, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	---	---	---	---	---
MAX	---	---	---	---	---
(WY)	---	---	---	---	---
MIN	---	---	---	---	---
(WY)	---	---	---	---	---

SUMMARY STATISTICS  
HIGHEST DAILY MEAN  
LOWEST DAILY MEAN  
ANNUAL SEVEN-DAY MINIMUM  
INSTANTANEOUS PEAK FLOW  
INSTANTANEOUS PEAK STAGE  
10 PERCENT EXCEEDS  
50 PERCENT EXCEEDS  
90 PERCENT EXCEEDS

FOR 1993 WATER YEAR\*  
2370 May 22  
33 Sep 12, 30  
--  
2780 May 22  
6.41 May 22  
--  
--  
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WATER YEARS 1984 - 1993\*  
3160 May 16 1984  
3.8 Sep 30 1992  
5.3 Aug 18 1988  
3680 May 16 1984  
7.35 May 16 1984  
971  
161  
27

\* During period of operation.

## BEAR RIVER BASIN

10020100 BEAR RIVER ABOVE RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°26'04", long 111°01'01", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 29, T. 17 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, on right bank 9.3 mi upstream from Woodruff Narrows Dam and 10 mi southeast of Woodruff.

DRAINAGE AREA.--752 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,455 ft above sea level, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion for irrigation of about 43,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,150 ft<sup>3</sup>/s June 2, 1983, gage height, 6.17 ft; minimum, no flow several days during August and September 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,520 ft<sup>3</sup>/s May 23, gage height, 5.51 ft; minimum discharge, 1.1 ft<sup>3</sup>/s Nov. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	18	16	e14	e13	e16	311	311	1640	509	127	64
2	5.4	20	17	e12	e15	e17	360	262	1570	441	120	66
3	5.7	19	18	e11	e12	e19	331	258	1580	484	101	63
4	4.5	16	18	e11	e11	e22	328	478	1400	505	95	61
5	4.4	12	19	e10	e11	e24	391	707	1090	478	106	52
6	6.2	11	18	e13	e13	e24	348	687	904	378	143	43
7	6.6	11	18	e14	e14	e24	278	993	821	295	119	44
8	6.9	12	19	e14	e16	e26	243	922	678	232	123	52
9	8.6	14	e18	e14	e16	e29	293	671	606	199	132	52
10	8.3	12	e17	e14	e16	e28	342	608	462	185	125	29
11	7.9	8.4	e18	e12	e15	e24	341	538	467	173	126	21
12	8.1	3.7	e18	e12	e13	e26	292	645	613	175	154	24
13	7.3	11	e17	e12	e12	e30	261	764	711	173	121	23
14	5.6	14	e15	e13	e13	e34	245	941	772	168	101	19
15	4.2	14	e15	e14	e13	e36	236	1180	831	151	89	27
16	4.4	15	e16	e14	e13	e37	244	1400	1050	137	84	29
17	4.5	16	e16	e14	e14	e43	276	1610	1120	129	76	27
18	4.8	14	e15	e14	e16	e47	301	1760	1080	114	70	34
19	5.1	13	e14	e14	e18	e45	259	1790	892	103	68	39
20	5.0	16	e14	e14	e14	e46	268	1870	858	93	80	39
21	4.9	16	e15	e14	e15	e43	243	1960	1040	82	84	41
22	4.6	12	e16	e14	e15	e60	256	2150	1150	77	92	42
23	5.0	13	e16	e14	e14	e130	361	2420	1110	91	83	42
24	5.8	11	e16	e14	e13	e400	389	2220	936	200	68	39
25	5.9	11	e14	e13	e11	427	331	2060	749	272	56	35
26	6.1	12	e14	e12	e12	450	297	2010	694	365	43	41
27	6.0	12	e15	e12	e13	551	374	2210	685	800	38	43
28	6.9	13	e16	e12	e15	558	377	2270	673	494	44	40
29	8.7	14	e15	e12	---	516	334	2060	618	306	65	38
30	25	15	e14	e11	---	380	336	1840	569	200	62	37
31	31	---	e14	e12	---	339	---	1720	---	149	64	---
TOTAL	229.5	399.1	501	400	386	4451	9246	41315	27369	8158	2859	1206
MEAN	7.40	13.3	16.2	12.9	13.8	144	308	1333	912	263	92.2	40.2
MAX	31	20	19	14	18	558	391	2420	1640	800	154	66
MIN	4.2	3.7	14	10	11	16	236	258	462	77	38	19
AC-FT	455	792	994	793	766	8830	18340	81950	54290	16180	5670	2390

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1993, BY WATER YEAR (WY)

	76.5	72.7	71.3	67.8	84.9	161	352	835	868	185	52.4	53.7
MEAN	437	198	181	147	312	627	671	1957	2564	870	340	288
MAX	1983	1974	1984	1984	1986	1986	1969	1984	1986	1975	1983	1983
(WY)	3.03	6.06	7.21	6.76	13.8	26.8	77.7	104	54.6	4.84	2.26	.49
MIN	1965	1989	1989	1989	1993	1977	1977	1977	1992	1988	1988	1988
(WY)												

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1962 - 1993

ANNUAL TOTAL	30250.73	96519.6	240
ANNUAL MEAN	82.7	264	583
HIGHEST ANNUAL MEAN			1986
LOWEST ANNUAL MEAN			1977
HIGHEST DAILY MEAN	691	2420	3900
LOWEST DAILY MEAN	.62	3.7	.00
ANNUAL SEVEN-DAY MINIMUM	.91	4.7	.00
ANNUAL RUNOFF (AC-FT)	60000	191400	174000
10 PERCENT EXCEEDS	259	825	708
50 PERCENT EXCEEDS	28	39	84
90 PERCENT EXCEEDS	3.0	11	9.5

e Estimated

## BEAR RIVER BASIN

185

## 10020200 WOODRUFF NARROWS RESERVOIR NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'10", long 111°00'55", in SE 1/4 NW 1/4 sec. 32, T. 18 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, in gate house at Woodruff Narrows Dam on Bear River, 5.6 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,405 ft above sea level, from levels by Bureau of Reclamation.

REMARKS.--Records fair. Reservoir formed by earthfill, rock-faced dam. Storage began Jan. 5, 1962. Total capacity, 28,000 acre-ft below spillway crest. Total capacity increased to 57,300 in 1980. Elevation of spillway is 6,454.50 ft; gage height, 50.4 ft. Figures given herein represent total contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 64,310 acre-ft June 2, 1983, gage height, 53.5 ft; minimum observed, 880 acre-ft Sept. 15-25, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 56,000 acre-ft June 5, 6; minimum contents, 3,970 acre-ft Oct. 28, 29, gage height, 12.30 ft.

## CAPACITY TABLE (GAGE-HEIGHT, IN FEET, AND TOTAL CONTENTS, IN ACRE-FEET)

13.0	4,420	35.0	27,620
14.0	5,030	40.0	36,160
20.0	9,520	45.0	45,660
25.0	14,390	48.0	51,920
30.0	20,280	49.0	54,130

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4340	4130	e4280	e5280	e7490	e9770	e22400	e26700	e51200	e29200	26510	25820
2	4320	e4160	e4280	e5340	e7570	e9850	e23400	e26800	e52800	e28400	26160	25830
3	4310	e4180	e4280	e5400	e7650	e9930	24100	e26900	e54400	e27700	25810	25790
4	4300	e4200	e4280	e5460	e7740	e10000	24760	e27100	e55000	e27400	25620	25740
5	4300	e4220	e4280	e5520	e7820	e10000	25430	e27200	e56000	e27200	25490	25690
6	4290	e4250	e4290	e5580	e7900	e10100	26130	e27200	e56000	e26700	25570	25620
7	4300	e4260	e4290	e5640	e7980	e10200	26810	e27200	e55900	e25800	25670	25530
8	4290	e4290	e4290	e5700	e8060	e10300	e27000	e27200	e55000	e25400	25820	25470
9	4260	e4310	e4290	e5770	e8140	e10300	e27000	e27200	e54000	e25300	26020	25390
10	4240	4330	e4290	e5830	e8220	e10400	e26900	e27200	e53600	e25200	26270	25260
11	e4220	4320	e4300	e5900	e8300	e10500	e26800	e27800	e52000	e25100	26400	25170
12	e4200	4330	e4300	e5960	e8380	e10600	e26700	e28400	e51000	e25000	26560	25060
13	4190	4320	e4300	e6020	e8460	e10700	e26600	e29000	e49900	e25000	26680	25000
14	4150	4250	e4300	e6090	e8550	e10800	e26500	e29600	e49000	e24900	26760	24980
15	4120	4250	e4300	e6150	e8630	e10900	e26400	e30200	e47500	24860	26780	24900
16	4100	4260	e4300	e6220	e8710	e10900	e26300	e30800	e46500	24850	26800	24800
17	4080	4250	e4360	e6280	e8790	e11000	e26200	e31400	e45000	24860	26740	24720
18	4060	4250	e4420	e6360	e8870	e11100	e26100	e32100	e43300	24800	26640	24660
19	4060	e4250	e4480	e6440	e8950	e11800	e26000	e33300	e42000	24780	26520	24590
20	4030	e4260	e4540	e6520	e9030	e12500	e25900	e34400	e40800	24790	26460	24520
21	4030	e4270	e4610	e6600	e9110	e13200	e25800	e35700	e39700	24730	26490	24500
22	e4030	e4270	e4670	e6680	e9190	e13900	e25800	e37000	e38500	24750	26510	24440
23	4020	e4270	e4730	e6760	e9270	e14600	25800	e38300	e37400	24830	26490	24350
24	4020	e4270	e4790	e6840	e9360	e15500	26010	e39700	e36000	24930	26410	24380
25	4000	e4270	e4850	e6930	e9440	e16300	e26100	e41100	e35000	25280	26320	24410
26	3980	e4280	e4910	e7010	e9520	e17200	e26200	e42500	e34000	25650	26240	24400
27	3980	e4280	e4970	e7090	e9600	e18000	e26100	e43900	e33000	26450	26150	24390
28	3970	e4280	e5030	e7170	e9680	e18800	e26400	e45200	e32000	27060	26010	24640
29	3970	e4280	e5090	e7250	---	e19600	e26500	e46700	e31000	27080	25920	24530
30	4010	e4280	e5150	e7330	---	e20400	e26600	e48100	e30000	27080	25890	24560
31	4070	---	e5220	e7410	---	e21400	---	e49600	---	26840	25790	---
MAX	4340	4330	5220	7410	9680	21400	27000	49600	56000	29200	26800	25830
MIN	3970	4130	4280	5280	7490	9770	22400	26700	30000	24730	25490	24350
(#)	12.4	--	--	--	--	--	--	--	--	34.5	33.9	33.0
(*)	-510	+210	+940	+2190	+2270	+11720	+5200	+23000	-19600	-3160	-1050	-1230

CAL YR 1992 (\*) -28,780  
WTR YR 1993 (\*) +19,980

(#) Elevation, in feet, at end of month.

(\*) Change in contents.

(e) No gage reading, contents interpolated.

## BEAR RIVER BASIN

10020300 BEAR RIVER BELOW RESERVOIR, NEAR WOODRUFF, UT

LOCATION.--Lat 41°30'20", long 111°00'50", in NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 32, T. 18 N., R. 120 W., Uinta County, Wyoming, Hydrologic Unit 16010101, on right bank 1,100 ft downstream from Woodruff Narrows Dam, 1.6 mi upstream from Salt Creek, 5.4 mi upstream from Wyoming-Utah State line, and 7.7 mi east of Woodruff.

DRAINAGE AREA.--784 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,398.96 ft above sea level (levels by Utah Water Resources Division from Bureau of Reclamation bench mark). Prior to Sept. 26, 1962, at site 175 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Woodruff Narrows Reservoir (station 10020200) beginning January 1962. Diversions for irrigation of about 43,500 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft<sup>3</sup>/s June 2, 1983, gage height, 8.26 ft; no flow July 4, 5, 1962, Aug. 30, 31, Sept. 1, 2, 6, 7, 1979, Oct. 30, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,660 ft<sup>3</sup>/s June 11, gage height, 6.46 ft; minimum daily discharge, 2.6 ft<sup>3</sup>/s Oct. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e10	4.8	13	13	15	17	24	348	1230	e882	254	74
2	e10	5.6	13	13	15	17	25	390	1260	e750	254	74
3	e10	6.1	13	13	15	17	26	388	1240	e750	218	74
4	e17	6.5	14	13	15	17	28	390	1210	e750	194	74
5	e20	6.6	13	13	15	17	27	392	1190	e750	113	74
6	e20	6.4	13	13	15	18	28	468	1190	e580	59	74
7	e20	6.3	13	14	15	18	28	652	1190	e500	59	74
8	20	4.7	13	14	15	18	111	1080	1200	e500	59	74
9	20	8.9	13	14	15	18	159	1080	1220	e500	59	74
10	20	15	13	14	16	18	296	1070	986	e230	60	74
11	20	15	13	14	16	18	406	799	666	e102	60	74
12	20	15	13	14	16	18	469	621	1640	e102	60	74
13	14	14	13	14	16	19	468	620	1620	102	59	74
14	11	14	13	14	16	19	467	625	1580	103	60	74
15	11	14	13	14	16	18	392	630	1580	118	60	74
16	10	14	13	14	16	19	353	915	1570	131	76	74
17	10	14	13	14	16	19	358	1220	1560	131	90	74
18	11	13	14	15	16	19	358	1440	1550	132	90	74
19	10	13	13	15	16	19	358	1450	1540	131	90	74
20	10	13	14	15	16	19	358	1450	1520	124	89	74
21	10	13	13	15	16	20	306	1470	1510	88	90	74
22	10	13	13	14	16	20	269	1390	1490	67	90	74
23	10	13	13	14	16	21	269	1110	1490	68	89	46
24	10	13	14	14	17	21	269	1040	1480	67	81	19
25	10	13	14	14	16	22	287	1100	1470	67	73	19
26	10	13	14	14	16	22	295	1150	1450	112	74	19
27	10	13	14	14	17	23	296	1170	1440	237	74	19
28	10	13	14	14	17	23	317	1130	1420	329	74	19
29	9.5	13	14	15	---	23	337	1120	1410	330	74	19
30	2.6	13	13	15	---	24	337	1150	1390	284	74	19
31	4.2	---	14	15	---	24	---	1190	---	255	74	---
TOTAL	390.3	339.9	413	435	442	605	7721	29048	41292	9272	2930	1807
MEAN	12.6	11.3	13.3	14.0	15.8	19.5	257	937	1376	299	94.5	60.2
MAX	20	15	14	15	17	24	469	1470	1640	882	254	74
MIN	2.6	4.7	13	13	15	17	24	348	666	67	59	19
AC-FT	774	674	819	863	877	1200	15310	57620	81900	18390	5810	3580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1993, BY WATER YEAR (WY)

MEAN	58.2	56.9	47.4	45.6	50.0	104	295	793	995	283	80.4	54.6
MAX	425	421	184	153	171	473	891	1828	2437	913	331	278
(WY)	1983	1983	1983	1985	1971	1972	1985	1984	1983	1975	1983	1983
MIN	3.89	1.12	4.28	4.37	4.71	4.70	3.34	27.8	396	20.0	3.91	3.65
(WY)	1990	1981	1978	1978	1978	1978	1977	1977	1977	1966	1979	1979

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1962 - 1993

	1992	1993	1962-1993
ANNUAL TOTAL	44283.3	94695.2	
ANNUAL MEAN	121	259	
HIGHEST ANNUAL MEAN			239
LOWEST ANNUAL MEAN			509
HIGHEST DAILY MEAN	987	1640	44.3
LOWEST DAILY MEAN	2.6	2.6	3630
ANNUAL SEVEN-DAY MINIMUM	5.2	5.2	.00
ANNUAL RUNOFF (AC-FT)	87840	187800	.07
10 PERCENT EXCEEDS	489	1160	791
50 PERCENT EXCEEDS	20	22	42
90 PERCENT EXCEEDS	10	13	8.3

e Estimated

## BEAR RIVER BASIN

187

10023000 BIG CREEK NEAR RANDOLPH, UT

LOCATION.--Lat 41°36'36", long 111°15'12", in NW1/4NW1/4NE1/4 sec. 15, T. 10 W., R. 6 E., Rich County, Hydrologic Unit 16010101, on left bank 2.7 mi downstream from main forks and 5.2 mi southwest of Randolph.

DRAINAGE AREA.--52.4 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1939 to September 1944 (fragmentary), October 1949 to September 1970. October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,410 ft above sea level, from topographic map. March 1939 to September 1944 (fragmentary), at site 0.2 mi downstream at different datum, October 1949 to September 1959 at site 200 ft upstream at different datum, September 1959 to September 1970 at site 300 ft upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 337 ft<sup>3</sup>/s July 11, 1957, gage height, 3.75 ft, site and datum then in use; minimum discharge, 0.9 ft<sup>3</sup>/s Aug. 4, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 16	2100	*72	*4.66	No other peak greater than base discharge.			

Minimum daily discharge, 1.8 ft<sup>3</sup>/s Oct. 1-3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.8	e2.8	e3.1	e2.9	e3.3	e3.7	e17	25	11	7.8	7.5
2	1.8	3.1	e3.0	e3.1	e2.9	e3.4	e3.7	e20	25	e10	7.7	7.4
3	1.8	2.9	e2.8	e2.7	e2.8	e3.4	e3.8	e21	25	e10	7.8	7.3
4	1.9	2.6	e2.6	e2.7	e2.7	e3.3	e3.9	e22	23	e10	9.0	7.4
5	2.0	2.8	e2.7	e2.4	e2.7	e3.2	e4.2	e23	22	e10	8.5	7.6
6	2.0	2.8	e2.6	e2.5	e2.9	e3.2	e4.0	23	21	e10	7.9	7.5
7	2.1	2.6	e2.8	e2.6	e2.9	e3.3	e3.7	23	18	e9.9	8.2	7.4
8	2.1	2.6	e3.1	e2.7	e3.0	e3.4	e4.4	22	18	e9.9	9.2	7.4
9	2.1	2.7	e3.2	e2.7	e3.0	e3.3	e5.6	22	17	e9.9	8.3	7.5
10	2.1	2.9	e3.1	e2.8	e3.1	e3.4	e6.9	22	15	e9.6	9.3	7.4
11	2.1	3.2	e3.0	e2.7	e3.2	e3.5	e5.8	23	14	e9.1	8.7	7.3
12	2.1	3.0	e3.0	e2.6	e3.0	e3.3	e4.7	27	14	e9.1	8.5	7.4
13	2.0	3.5	e2.9	e2.8	e2.9	e3.4	e3.6	31	13	e9.0	8.1	7.7
14	2.0	3.0	e2.9	e2.7	e2.7	e3.6	e4.0	40	13	e9.1	7.9	7.8
15	2.0	3.0	e2.6	e2.9	e2.8	e3.7	e4.6	47	13	e9.1	7.8	7.6
16	2.0	2.8	e2.7	e2.8	e2.8	e3.8	e5.0	57	13	e9.1	7.6	7.9
17	2.0	2.8	e2.9	e2.9	e2.9	3.3	e7.5	69	14	e9.1	7.7	8.5
18	2.0	2.7	e2.8	e3.0	e3.1	e3.3	e8.2	65	14	e9.1	7.6	8.5
19	2.1	2.6	e2.7	e3.0	e3.3	e3.3	e7.4	61	12	e9.1	7.7	8.2
20	2.1	2.6	e2.8	e2.9	e3.2	e3.1	e6.2	59	12	e9.1	8.0	7.9
21	2.1	2.6	e2.9	e3.1	e3.0	e3.0	e6.9	59	12	e9.1	8.1	7.8
22	2.1	3.3	e3.0	e3.0	e3.0	e2.9	e7.9	59	12	e9.1	8.7	7.7
23	2.1	3.4	e3.0	e2.9	e3.1	e3.0	7.9	50	11	e9.1	7.8	7.8
24	2.1	2.7	e2.9	e2.8	e3.2	e3.4	7.9	43	11	e9.1	7.6	7.6
25	2.1	e2.5	e2.9	e2.9	e2.9	e4.0	8.5	40	10	e9.1	7.5	7.5
26	2.1	e2.6	e2.8	e2.8	e2.7	e4.0	9.3	38	9.8	e9.1	7.4	7.4
27	2.3	e2.7	e2.8	e2.8	e2.9	e3.8	e10	35	e9.5	e8.8	7.4	7.4
28	2.3	e2.8	e3.0	e2.7	e3.0	e3.7	e11	33	e9.8	8.5	7.4	7.4
29	2.3	e2.7	e3.2	e2.7	---	e3.6	e14	31	e9.8	8.3	7.4	7.4
30	3.3	e2.8	e3.0	e2.6	---	e3.6	e15	29	e10	8.0	7.5	7.4
31	3.5	---	e2.8	e2.8	---	e3.7	---	27	---	7.8	7.5	---
TOTAL	66.4	85.1	89.3	86.7	82.6	106.2	199.3	1138	445.9	287.2	247.6	228.6
MEAN	2.14	2.84	2.88	2.80	2.95	3.43	6.64	36.7	14.9	9.26	7.99	7.62
MAX	3.5	3.5	3.2	3.1	3.3	4.0	15	69	25	11	9.3	8.5
MIN	1.8	2.5	2.6	2.4	2.7	2.9	3.6	17	9.5	7.8	7.4	7.3
AC-FT	132	169	177	172	164	211	395	2260	884	570	491	453

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950-70, 1987-93, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1950	11.7	26.3	1952	2.14	1993
1951	10.8	25.9	1987	2.84	1993
1952	9.66	23.7	1987	2.18	1991
1953	8.70	23.4	1987	2.17	1991
1954	8.62	22.6	1987	2.63	1991
1955	9.53	22.6	1987	2.65	1991
1956	15.3	42.3	1951	3.56	1991
1957	29.6	95.4	1952	2.85	1992
1958	21.4	62.2	1952	1.86	1992
1959	15.3	40.3	1950	1.48	1961
1960	12.8	31.8	1950	1.29	1992
1961	11.7	28.4	1952	1.80	1992

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1950-70, 1987-93

ANNUAL TOTAL	1006.0	3062.9	
ANNUAL MEAN	2.75	8.39	
HIGHEST ANNUAL MEAN			13.8
LOWEST ANNUAL MEAN			32.1
HIGHEST DAILY MEAN	5.6	69	3.24
LOWEST DAILY MEAN	1.0	1.8	1.0
ANNUAL SEVEN-DAY MINIMUM	1.1	1.9	1.1
ANNUAL RUNOFF (AC-FT)	2000	6080	9980
10 PERCENT EXCEEDS	4.3	19	27
50 PERCENT EXCEEDS	2.8	3.8	10
90 PERCENT EXCEEDS	1.5	2.6	3.6

e Estimated



## BEAR RIVER BASIN

10028500 BEAR RIVER BELOW PIXLEY DAM, NEAR COKEVILLE, WY

LOCATION.--Lat 41°56'20", long 110°59'05", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 25, T. 23 N., R. 120 W., Lincoln County, Hydrologic Unit 16010102, 800 ft downstream from Pixley Dam, 11 mi south of Cokeville, and 17.5 mi downstream from Twin Creek.

DRAINAGE AREA.--2,032 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1941 to November 1943 (published as Bear River near Cokeville), October 1952 to September 1956, May 1958 to current year (seasonal only). Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,185 ft above sea level, from river-profile map. Oct. 31, 1941 to Nov. 30, 1943, at site 200 ft downstream at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,300 ft<sup>3</sup>/s Mar. 25, 1956; minimum recorded, 0.24 ft<sup>3</sup>/s Apr. 26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 943 ft<sup>3</sup>/s June 22; minimum daily discharge, 42 ft<sup>3</sup>/s Sept. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e270	193	597	840	324	116
2	---	---	---	---	---	---	e279	198	584	837	312	116
3	---	---	---	---	---	---	267	193	590	828	300	112
4	---	---	---	---	---	---	231	197	621	767	293	103
5	---	---	---	---	---	---	210	223	646	728	286	99
6	---	---	---	---	---	---	194	280	713	678	250	97
7	---	---	---	---	---	---	175	366	788	592	241	93
8	---	---	---	---	---	---	162	451	809	526	210	86
9	---	---	---	---	---	---	159	460	831	455	188	81
10	---	---	---	---	---	---	164	593	824	396	173	72
11	---	---	---	---	---	---	165	722	798	371	161	61
12	---	---	---	---	---	---	179	750	777	331	164	57
13	---	---	---	---	---	---	225	673	697	314	166	56
14	---	---	---	---	---	---	286	527	696	297	152	55
15	---	---	---	---	---	---	302	442	752	273	147	53
16	---	---	---	---	---	---	312	396	778	263	142	53
17	---	---	---	---	---	---	310	334	800	273	138	53
18	---	---	---	---	---	---	301	301	820	249	145	57
19	---	---	---	---	---	---	305	431	850	236	151	61
20	---	---	---	---	---	---	295	474	878	236	153	60
21	---	---	---	---	---	---	283	494	898	244	148	52
22	---	---	---	---	---	---	272	526	943	225	144	59
23	---	---	---	---	---	---	266	549	937	217	140	59
24	---	---	---	---	---	---	246	574	907	225	137	50
25	---	---	---	---	---	---	228	584	880	216	135	54
26	---	---	---	---	---	---	221	555	866	222	130	50
27	---	---	---	---	---	---	153	571	850	223	124	43
28	---	---	---	---	---	---	123	612	828	210	122	43
29	---	---	---	---	---	---	138	628	832	211	121	42
30	---	---	---	---	---	---	144	614	840	289	120	42
31	---	---	---	---	---	---	---	597	---	324	118	---
TOTAL	---	---	---	---	---	---	6865	14508	23630	12096	5535	2035
MEAN	---	---	---	---	---	---	229	468	788	390	179	67.8
MAX	---	---	---	---	---	---	312	750	943	840	324	116
MIN	---	---	---	---	---	---	123	193	584	210	118	42
AC-FT	---	---	---	---	---	---	13620	28780	46870	23990	10980	4040

e Estimated

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LOCATION.--Lat 42°17'36", long 110°52'18", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 28, T. 27 N., R. 118 W., Lincoln County, Hydrologic Unit 16010102, on left bank 4.9 mi upstream from Howland Creek, 5.6 mi downstream from Hobbie Creek, and 12.4 mi northeast of Border.

REVISED RECORDS.--WSP 1734: 1952 (M) .

REMARKS.--Records good, except for estimated daily discharges, which are poor. One diversion for irrigation of about 200 acres above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,240 ft<sup>3</sup>/s May 26, 27, gage height, 4.26 ft; minimum daily discharge, 36 ft<sup>3</sup>/s Feb. 26.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	66	e58	e62	e49	e41	e135	e165	994	519	225	134
2	61	70	e59	e60	e51	e42	e130	e170	952	500	220	133
3	61	63	e59	e56	e51	e42	e130	e180	937	505	216	131
4	61	67	e56	e53	e49	e43	e130	e190	842	478	213	131
5	62	62	e52	e50	e48	e43	e120	e200	816	450	214	134
6	62	60	e53	e50	e48	e43	e115	e220	781	430	210	130
7	62	60	e54	e50	e49	e43	e110	246	776	412	200	129
8	60	62	e60	e51	e49	e43	e110	233	747	398	203	126
9	61	60	e66	e52	e50	e43	e110	232	702	385	190	122
10	60	e57	e66	e54	e51	e43	e110	256	675	378	187	120
11	58	e52	e67	e51	e52	e43	e110	323	732	370	191	118
12	58	e55	e64	e48	e51	e43	e110	446	764	358	191	116
13	58	60	e64	e50	e50	e44	e120	588	753	348	178	119
14	58	58	e64	e51	e47	e45	e140	724	740	334	173	117
15	58	59	e62	e49	e46	e47	e160	854	774	326	170	115
16	58	58	e60	e50	e47	e49	e170	901	811	318	168	114
17	59	58	e60	e52	e48	e50	e190	957	807	309	165	113
18	58	58	e61	e53	e49	e52	e200	960	768	297	163	114
19	58	57	e61	e51	e49	e54	e200	978	737	291	160	114
20	59	56	e59	e52	e47	e56	e200	1030	732	284	158	110
21	59	e54	e57	e56	e45	e62	e195	1140	735	280	166	108
22	59	e56	e57	e56	e45	e70	e190	1160	738	277	158	108
23	58	60	e56	e54	e43	e88	e190	1110	685	293	154	106
24	59	e58	e56	e52	e40	e110	e190	1060	635	302	148	106
25	59	60	e57	e50	e37	e150	e190	1070	597	279	147	103
26	59	e55	e58	e49	e36	e190	e190	1170	582	300	145	102
27	59	e54	e60	e49	e38	e240	e185	1200	576	271	144	102
28	61	e54	e62	e48	e40	e200	e175	1190	580	252	142	104
29	70	e55	e64	e48	---	e170	e170	1120	579	246	138	106
30	76	e56	e61	e48	---	e155	e165	1030	546	240	137	105
31	71	---	e60	e48	---	e145	---	1000	---	231	136	---
TOTAL	1884	1760	1853	1603	1305	2489	4640	22103	22093	10661	5410	3490
MEAN	60.8	58.7	59.8	51.7	46.6	80.3	155	713	736	344	175	116
MAX	76	70	67	62	52	240	200	1200	994	519	225	134
MIN	58	52	52	48	36	41	110	165	546	231	136	102
AC-FT	3740	3490	3680	3180	2590	4940	9200	43840	43820	21150	10730	6920

MEAN	91.6	79.2	70.0	64.0	61.0	62.6	162	548	632	297	154	110
MAX	156	113	88.4	85.0	82.8	99.4	385	956	1377	602	242	166
(WY)	1987	1986	1983	1983	1984	1986	1946	1982	1986	1975	1983	1986
MIN	51.0	50.7	48.4	40.1	38.1	39.5	58.6	99.1	96.2	61.4	55.1	52.1
(WY)	1978	1978	1988	1988	1988	1988	1975	1977	1977	1977	1977	1977

ANNUAL TOTAL	38127		79291						
ANNUAL MEAN	104		217			195			
HIGHEST ANNUAL MEAN						324			1986
LOWEST ANNUAL MEAN						71.1			1977
HIGHEST DAILY MEAN	317	May 22	1200	May 27	2000		Jun 4		1986
LOWEST DAILY MEAN	51	Jan 20	36	Feb 26	34		Jan 2		1988
ANNUAL SEVEN-DAY MINIMUM	55	Feb 8	39	Feb 24	36		Feb 23		1988
ANNUAL RUNOFF (AC-FT)	75620		157300		141100				
10 PERCENT EXCEEDS	229		732		523				
50 PERCENT EXCEEDS	71		108		91				
90 PERCENT EXCEEDS	57		49		59				

e Estimated

## BEAR RIVER BASIN

10038000 BEAR RIVER BELOW SMITHS FORK, NEAR COKEVILLE, WY

LOCATION.--Lat 42°07'36", long 110°58'21", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 28, T. 25 N., R. 119 W., Lincoln County, Hydrologic Unit 16010102, on left bank 1.1 mi upstream from Wyman Dam, 2.8 mi northwest of Cokeville, and 3.8 mi downstream from Smiths Fork.

DRAINAGE AREA.--2,447 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1954 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,140 ft above sea level, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversion for irrigation, return flow from irrigated areas, and regulation by upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,620 ft<sup>3</sup>/s June 7, 1983, gage height, 8.75 ft; minimum, 31 ft<sup>3</sup>/s Oct. 4, 5, 6, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,050 ft<sup>3</sup>/s May 22, gage height, 5.82 ft; minimum discharge, 35 ft<sup>3</sup>/s Nov. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	119	e112	e110	e82	e78	683	457	1780	1530	554	312
2	84	127	e110	e100	e86	e82	645	506	1710	1510	541	309
3	79	127	e105	e92	e88	e85	590	529	1630	1530	521	304
4	82	115	e100	e87	e82	e90	542	651	1640	1490	514	281
5	84	132	e107	e82	e80	e95	508	683	1600	1400	509	292
6	85	127	e108	e83	e84	e100	452	759	1640	1400	488	277
7	89	122	e109	e86	e87	e103	404	880	1740	1210	440	270
8	89	124	111	e88	e88	e107	373	1020	1780	1000	444	260
9	89	130	120	e89	e88	e110	365	1030	1750	950	403	254
10	88	105	113	e88	e86	e112	364	1110	1720	841	384	245
11	87	91	111	e84	e86	e112	361	1340	1760	757	378	228
12	86	107	e108	e84	e86	e113	358	1560	1750	708	372	216
13	86	133	e102	e83	e82	e114	375	1590	1680	657	376	216
14	87	122	e103	e82	e80	e116	436	1580	1590	625	365	220
15	89	132	e98	e88	e78	e120	499	1550	1630	587	347	214
16	90	134	e94	e93	e78	e130	522	1570	1690	557	340	209
17	90	139	e104	e93	e81	143	539	1600	1750	557	341	207
18	91	144	e104	e93	e86	166	592	1550	1800	553	342	210
19	91	138	e100	e93	e90	189	589	1630	1820	525	346	218
20	90	137	e95	e92	e94	205	563	1720	1840	518	352	217
21	75	115	e94	e89	e86	239	540	1820	1860	508	360	209
22	76	e110	e94	e85	e82	270	523	1980	1920	478	357	199
23	76	e115	e94	e82	e78	329	541	1970	1930	469	347	203
24	75	e112	e95	e80	e75	389	519	1880	1850	507	345	205
25	74	e103	e96	e79	e72	599	484	1840	1750	492	337	194
26	73	e100	e98	e78	e72	940	482	1860	1670	511	333	198
27	74	e104	e103	e78	e75	1210	467	1890	1630	552	329	189
28	78	e110	e115	e78	e76	1130	391	1970	1610	510	332	180
29	96	e103	e125	e78	---	1020	406	1940	1600	470	323	175
30	118	e98	e110	e77	---	872	433	1900	1630	485	317	174
31	131	---	e105	e78	---	753	---	1860	---	548	315	---
TOTAL	2682	3575	3243	2672	2308	10121	14546	44225	51750	24505	12062	6885
MEAN	86.5	119	105	86.2	82.4	326	485	1427	1725	790	389	229
MAX	131	144	125	110	94	1210	683	1980	1930	1530	554	312
MIN	73	91	94	77	72	78	358	457	1590	469	315	174
AC-FT	5320	7090	6430	5300	4580	20070	28850	87720	102600	48610	23920	13660

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1993, BY WATER YEAR (WY)

MEAN	220	231	201	182	209	374	709	1034	1262	589	242	202
MAX	755	692	536	344	429	1159	1945	2794	3712	1556	707	658
(WY)	1983	1983	1983	1984	1986	1986	1985	1984	1983	1983	1983	1983
MIN	55.6	83.1	96.5	86.2	82.4	116	69.2	115	96.7	71.4	80.1	55.9
(WY)	1978	1978	1978	1993	1993	1988	1977	1977	1977	1977	1977	1977

## SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

## WATER YEARS 1955 - 1993

ANNUAL TOTAL	62649		178574						
ANNUAL MEAN	171		489			455			
HIGHEST ANNUAL MEAN						1049			1984
LOWEST ANNUAL MEAN						112			1977
HIGHEST DAILY MEAN	479	Mar 8	1980	May 22		5400		Jun 7	1983
LOWEST DAILY MEAN	73	Oct 26	72	Feb 25		31		Oct 5	1977
ANNUAL SEVEN-DAY MINIMUM	75	Oct 21	75	Oct 21		36		Oct 1	1977
ANNUAL RUNOFF (AC-FT)	124300		354200			329600			
10 PERCENT EXCEEDS	307		1630			1140			
50 PERCENT EXCEEDS	140		209			225			
90 PERCENT EXCEEDS	85		82			112			

e Estimated

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LOCATION.--Lat 42°12'40", long 111°03'11", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 15, T. 14 S., R. 46 E., Bear Lake County, Idaho, Hydrologic Unit 16010102, on left bank 0.2 mi west of Wyoming-Idaho State line, 0.5 mi west of Border, and 2.1 mi upstream from Thomas Fork.

WATER-DISCHARGE RECORDS

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by regulation of upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft<sup>3</sup>/s June 7, 1983, gage height, 9.69 ft; minimum, 24 ft<sup>3</sup>/s Apr. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,960 ft<sup>3</sup>/s May 23, gage height, 7.01 ft; minimum daily discharge, 70 ft<sup>3</sup>/s several days in January and February.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	108	e106	e108	e70	e78	680	452	1540	1380	537	272
2	78	112	e109	e94	e72	e82	642	488	1500	1370	515	276
3	77	111	e99	e82	e76	e88	601	519	1480	1390	487	269
4	77	107	e89	e76	e72	e96	567	598	1480	e1360	482	252
5	79	112	e95	e70	e71	e98	536	684	1460	e1300	478	255
6	80	110	e101	e71	e72	e100	494	760	1470	1290	461	246
7	83	113	e110	e75	e73	e100	445	862	1510	1170	418	243
8	83	119	e114	e80	e77	e102	413	981	1560	1050	435	235
9	82	123	e117	e82	e80	e103	400	1010	1540	969	389	230
10	81	113	e118	e82	e82	e110	396	1040	1530	865	370	223
11	80	110	e114	e78	e82	e110	388	1230	1540	786	368	209
12	81	112	e110	e78	e82	e110	380	1410	1540	737	361	194
13	82	126	e106	e74	e80	e110	395	1510	1500	687	359	196
14	81	115	e104	e73	e71	e112	422	1550	1440	661	345	202
15	81	120	e98	e80	e70	e115	480	1550	1430	612	312	196
16	83	116	e100	e83	e70	e120	503	1570	1460	579	304	192
17	83	118	e110	e83	e74	e130	526	1640	1500	578	300	191
18	82	124	e109	e83	e78	e140	475	1620	1520	568	297	193
19	83	122	e104	e83	e80	e155	508	1590	1530	539	297	200
20	82	120	e97	e82	e80	e175	490	1650	1530	529	299	204
21	76	106	e98	e80	e80	e200	478	1760	1550	516	310	197
22	74	e105	e99	e75	e76	e250	484	1900	1610	490	310	187
23	74	e102	e100	e73	e76	e300	500	1940	1660	496	300	190
24	75	e98	e104	e71	e76	e380	504	1840	1620	538	298	192
25	75	e94	e105	e70	e73	488	478	1740	1550	522	291	183
26	74	e95	e107	e70	e70	766	472	1670	1470	552	287	182
27	75	e102	e110	e70	e70	1020	474	1680	1430	589	284	181
28	80	e98	e116	e70	e73	984	409	1720	1410	532	290	172
29	88	e94	e119	e70	---	929	402	1710	1400	487	282	168
30	102	e100	e110	e70	---	827	441	1630	1450	491	273	166
31	114	---	e102	e70	---	733	---	1580	---	539	271	---
TOTAL	2518	3305	3280	2406	2106	9111	14383	41884	45210	24172	11010	6296
MEAN	81.2	110	106	77.6	75.2	294	479	1351	1507	780	355	210
MAX	114	126	119	108	82	1020	680	1940	1660	1390	537	276
MIN	73	94	89	70	70	78	380	452	1400	487	271	166
AC-FT	4990	6560	6510	4770	4180	18070	28530	83080	89670	47950	21840	12490

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1993, BY WATER YEAR (WY)

MEAN	208	226	200	183	210	387	764	1028	1152	510	221	178
MAX	751	693	563	381	479	1294	1979	3158	3829	1670	752	671
(WY)	1983	1983	1983	1985	1986	1986	1985	1952	1983	1983	1983	1983
MIN	51.4	81.2	106	77.6	75.2	105	71.2	74.4	62.2	54.2	42.3	38.5
(WY)	1978	1978	1993	1993	1993	1988	1977	1977	1977	1977	1940	1940

### SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

## WATER YEARS 1938 - 1993

ANNUAL TOTAL	56728		165681			
ANNUAL MEAN	155		454		439	
HIGHEST ANNUAL MEAN					1068	1983
LOWEST ANNUAL MEAN					103	1977
HIGHEST DAILY MEAN	456	Mar 8	1940	May 23	4840	Jun 8 1983
LOWEST DAILY MEAN	33	Aug 15	70	Jan 5	25	Apr 29 1977
ANNUAL SEVEN-DAY MINIMUM	34	Aug 12	70	Jan 25	29	Apr 28 1977
ANNUAL RUNOFF (AC-FT)	112500		328600		318100	
10 PERCENT EXCEEDS	253		1500		1130	
50 PERCENT EXCEEDS	141		193		225	
90 PERCENT EXCEEDS	74		76		110	

e Estimated

## BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year. Prior to 1981 water year, published in "Water Resources Data for Wyoming."

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1965 to September 1976, January 1978 to September 1981.

WATER TEMPERATURES: October 1965 to September 1976, January 1978 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,580 microsiemens Dec. 27, 1975; minimum daily, 312 microsiemens Apr. 3, 1969.

WATER TEMPERATURES: Maximum, 23.5°C Aug. 14, 1980; minimum, 0.0°C on many days during winter periods.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCHI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)
OCT, 1992												
09...	1120	85	590	8.3	18.0	7.0	2.7	9.3	606	K4	K4	270
FEB, 1993												
09...	1430	80	655	8.1	-1.0	0.0	3.6	10.3	603	K8	K4	300
APR 07...	1200	417	810	8.3	4.0	6.0	65	9.4	609	K18	97	320
MAY 27...	1254	1720	485	8.3	24.0	14.5	77	7.8	608	120	68	220
SEP 08...	1415	228	580	8.4	24.0	16.0	7.0	8.6	613	25	K2	270

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT, 1992												
09...	68	23	22	15	0.6	1.7	1	242	200	73	23	0.20
FEB, 1993												
09...	75	26	24	15	0.6	1.6	0	281	230	75	28	0.20
APR 07...	67	36	46	24	1	5.2	2	288	239	120	53	0.20
MAY 27...	56	19	16	14	0.5	2.3	0	236	193	37	19	0.20
SEP 08...	68	24	22	15	0.6	1.6	10	225	200	63	23	0.20

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT, 1992											
09...	7.5	337	339	0.46	77.1	--	--	<0.010	<0.010	<0.050	<0.050
FEB, 1993											
09...	11	383	380	0.52	82.5	0.160	0.160	--	0.020	--	0.180
APR 07...	13	516	485	0.70	581	0.110	--	--	<0.010	--	0.110
MAY 27...	9.5	281	276	0.38	1300	0.072	--	--	<0.010	--	0.072
SEP 08...	6.9	320	330	0.44	197	--	--	--	<0.010	--	<0.050

K Results based on colony counts outside acceptable range (non-ideal colony count).

## BEAR RIVER BASIN

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10039500 BEAR RIVER AT BORDER, WY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
OCT, 1992											
09...	0.010	<0.010	--	--	<0.20	--	<0.010	<0.010	<0.010	<0.010	--
FEB, 1993											
09...	--	0.030	0.04	--	<0.20	--	0.020	<0.010	--	<0.010	--
APR...											
07...	--	0.020	0.03	0.88	0.90	1.0	0.210	0.020	--	<0.010	--
MAY...											
27...	--	0.030	0.04	0.67	0.70	0.77	0.290	0.020	--	0.020	0.06
SEP...											
08...	--	0.030	0.04	--	<0.20	--	0.030	0.020	--	0.020	0.06

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT, 1992							
09...	1120	<10	87	<3	5	14	16
FEB, 1993							
09...	1430	<10	94	<3	<3	13	15
MAY...							
27...	1254	<10	110	<3	8	11	5
SEP...							
08...	1415	<10	110	<3	<3	15	10

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
OCT, 1992						
09...	<10	<1	<1	<1.0	590	<6
FEB, 1993						
09...	<10	<1	<1	<1.0	550	<6
MAY...						
27...	<10	<1	<1	<1.0	360	<6
SEP...						
08...	<10	1	<1	<1.0	510	<6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT, 1992						
09...	1120	85	7.0	--	35	8.0
FEB, 1993						
09...	1430	80	0.0	--	79	17
APR...						
07...	1200	417	6.0	91	157	177
07...	1215	417	6.0	91	136	153
07...	1218	417	5.5	88	146	164
07...	1221	417	5.5	88	173	195
07...	1224	417	6.0	93	154	173
07...	1227	417	6.0	87	182	205
MAY...						
27...	1254	1720	14.5	--	235	1090
SEP...						
08...	1415	228	16.0	--	95	58



LOCATION.--Lat 42°13'48", long 111°17'43", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 3, T. 14 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 1.5 mi west of Dingle and 1.8 mi downstream from headworks at Stewart Dam.

GAGE.--Water-stage recorder. Elevation of gage datum is 5,922.0 ft above sea level, (by topographic survey). Prior to Oct. 1, 1923, at site 300 ft downstream at different datum; Oct. 1, 1923 to Oct. 27, 1944, at site 0.5 mi downstream at different datum.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,950 ft<sup>3</sup>/s May 27 1984; no flow Apr. 28, 1977 and Oct. 1, 1979.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	68	62	56	58	73	817	414	1570	1180	522	306
2	19	66	57	56	57	72	783	419	1400	1110	508	304
3	19	68	55	55	56	71	737	448	1320	1120	471	307
4	19	74	57	55	57	72	707	492	1250	1120	464	300
5	21	72	51	56	63	73	673	591	1280	1180	475	297
6	20	71	47	61	67	74	629	699	1260	1170	472	298
7	22	76	41	59	65	77	582	721	1310	1190	459	291
8	24	76	43	57	67	83	521	838	1470	1050	435	287
9	26	75	47	58	67	87	482	969	1540	931	431	282
10	27	74	49	59	65	88	470	998	1540	803	389	245
11	27	64	50	58	62	86	451	1050	1590	738	372	198
12	27	50	50	53	65	110	434	1250	1620	705	363	174
13	25	48	55	59	68	104	419	1400	1580	652	352	133
14	29	59	56	60	71	97	422	1580	1480	603	349	139
15	31	60	53	60	78	96	453	1660	1260	553	336	149
16	30	59	50	58	107	103	508	1690	1120	526	322	154
17	30	64	52	54	87	118	523	1650	1150	504	314	148
18	32	66	51	53	82	139	539	1780	1270	496	307	150
19	33	68	50	52	74	163	512	1740	1280	450	301	147
20	34	67	52	55	69	201	530	1760	1280	447	303	150
21	33	64	53	57	82	229	516	1770	1310	452	310	155
22	31	65	52	57	87	255	490	1830	1330	452	321	153
23	31	58	52	54	77	292	488	1950	1350	459	329	150
24	31	89	54	53	71	339	500	2020	1410	482	325	135
25	31	48	56	53	85	411	492	1970	1420	515	324	133
26	32	43	57	56	78	582	476	1870	1380	528	325	134
27	32	55	55	60	77	945	463	1790	1300	572	321	135
28	32	55	53	62	73	1110	450	1740	1260	577	318	145
29	81	56	54	60	---	1090	391	1730	1200	532	318	151
30	45	64	53	57	---	1010	386	1720	1170	491	317	147
31	61	---	57	57	---	903	---	1670	---	491	312	---
TOTAL	955	1922	1624	1760	2015	9153	15844	42209	40700	22079	11465	5897
MEAN	30.8	64.1	52.4	56.8	72.0	295	528	1362	1357	712	370	197
MAX	81	89	62	62	107	1110	817	2020	1620	1190	522	307
MIN	19	43	41	52	56	71	386	414	1120	447	301	133
AC-FT	1890	3810	3220	3490	4000	18150	31430	83720	80730	43790	22740	11700
CAL YR 1992	TOTAL	31067.4	MEAN	84.9	MAX	653	MIN	5.0	AC-FT	61620		
WTR YR 1993	TOTAL	155623	MEAN	426	MAX	2020	MIN	19	AC-FT	308700		

BEAR RIVER BASIN

195

10055500 BEAR LAKE AT LIFTON, NEAR ST. CHARLES, ID

LOCATION.--Lat 42°07'16", long 111°18'52", in NE¼, sec. 16, T. 15 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, in Lifton pumping plant of Utah Power & Light Co., 3.5 mi east of St. Charles.

DRAINAGE AREA.--435 mi<sup>2</sup>, approximately (does not include Mud Lake drainage).

PERIOD OF RECORD.--October 1903 to June 1906, elevations only, published as "at Fish Haven," January 1921 to current year. Monthly contents only January 1921 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,900 ft Utah Power & Light Co. datum.

REMARKS.--Outflow regulated by gates and pumps at the north end of Bear Lake and by gates in dike at north end of Mud Lake, a shallow interconnected lake. Principal inflow to Bear Lake is from Bear River through Rainbow Inlet Canal (station 10046000) and Dingle Inlet Canals into Mud Lake, from which the inflow can enter into Bear Lake either through the pumping plant or an opening in the dividing causeway. The inflow can be routed directly into the Outlet Canal (station 10059500). Usable capacity of Bear Lake is 1,421,000 acre-ft between elevation 5,902.00 ft, lower limit of pumps, and 5,923.65 ft, upper limit of storage with existing facilities. Water is used for irrigation and power development. Figures herein given represent usable contents.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,423,000 acre-ft June 10, 1923, elevation, 5,923.68 ft; no usable contents Nov. 9-19, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 557,000 acre-ft July 10, 11, elevation, 5,911.00 ft; minimum, 204,000 acre-ft Nov. 1-10, elevation, 5,905.40 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,905	179,500	5,910	492,300
5,906	241,000	5,911	556,800

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	204	205	206	216	231	273	318	434	543	534	526
2	219	204	205	206	217	232	275	319	439	544	534	524
3	219	204	205	207	217	233	277	320	444	545	534	523
4	219	204	205	207	218	233	280	321	448	547	534	522
5	219	204	205	207	219	234	281	324	452	549	534	521
6	219	204	205	207	219	235	283	334	455	550	535	519
7	218	204	205	207	219	235	284	359	458	552	535	519
8	217	204	205	207	220	236	286	364	462	554	536	518
9	217	204	205	207	220	236	287	368	468	555	537	517
10	217	204	205	208	220	237	289	370	474	557	537	517
11	217	205	205	208	221	238	290	373	479	557	538	517
12	216	205	205	208	222	238	291	376	485	555	539	517
13	216	205	205	208	222	239	293	379	490	555	539	517
14	216	205	205	209	222	239	294	383	492	554	540	517
15	216	205	205	209	222	240	296	388	495	552	541	517
16	215	207	205	209	223	241	299	393	499	551	541	517
17	214	205	205	209	223	241	301	398	502	549	541	517
18	214	205	205	209	223	242	304	402	505	546	541	517
19	212	205	205	210	223	243	306	405	508	543	541	517
20	212	205	205	210	224	243	308	407	512	541	540	517
21	211	205	205	211	225	244	308	409	517	539	540	517
22	209	205	205	211	225	245	309	411	521	538	539	515
23	208	205	205	211	226	246	309	413	524	537	539	514
24	207	205	205	211	227	247	310	417	528	535	538	512
25	206	205	205	212	227	249	311	420	530	535	537	510
26	206	205	206	212	229	254	313	421	531	534	535	508
27	206	205	206	213	229	259	314	422	534	534	534	508
28	205	205	206	214	230	262	315	423	536	534	532	508
29	205	205	206	214	---	265	316	425	537	534	531	508
30	205	205	206	215	---	270	317	428	540	534	529	508
31	205	---	206	216	---	272	---	431	---	534	527	---
MAX	220	207	206	216	230	272	317	431	540	557	541	526
MIN	205	204	205	206	216	231	273	318	434	534	527	508
(#)	5905.41	5905.41	5905.44	5905.59	5905.83	5906.51	5907.23	5909.04	5910.74	5910.65	5910.54	5910.25
(*)	-15	0	+1	+10	+14	+42	+45	+114	+109	-6	-7	-19

CAL YR 1992 : : : : (\*) -251  
WTR YR 1993 : : : : (\*) +288

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in thousands of acre-feet.

## BEAR RIVER BASIN

10059500 BEAR LAKE OUTLET CANAL NEAR PARIS, ID

LOCATION.--Lat 42°13'00", long 111°20'35", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 8, T. 14 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010201, on right bank 2,000 ft downstream from headgates (at dike) and 3 mi southeast of Paris.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 5,912.6 ft above sea level, unadjusted.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Bear Lake (station 10055500).

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--71 years, 412 ft<sup>3</sup>/s, 298,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,080 ft<sup>3</sup>/s June 19-21, 1986; minimum daily discharge, 1.0 ft<sup>3</sup>/s for many days in 1937, 1954, 1959, 1961, 1964, 1977-78.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e4.0	e4.0	e4.0	e4.0	e6.9	e10	e12	e12	e12	346	581
2	17	e4.0	e4.0	e4.0	e4.1	e7.0	e10	e12	e12	245	550	436
3	22	e4.0	e4.0	e4.0	e4.2	e7.1	e10	e12	e12	247	601	423
4	19	e4.0	e4.0	e4.0	e4.3	e7.2	e10	e12	e12	247	614	489
5	8.2	e4.0	e4.0	e4.0	e4.4	e7.3	e10	e12	e12	245	609	470
6	e4.8	e4.0	e4.0	e4.0	e4.5	e7.4	e11	e12	e12	243	430	451
7	e4.5	e4.0	e4.0	e4.0	e4.6	e7.5	e11	e12	e12	325	532	391
8	e4.5	e4.0	e4.0	e4.0	e4.7	e7.6	e11	e12	e12	448	500	306
9	e4.5	e4.0	e4.0	e4.0	e4.8	e7.7	e11	e12	e12	481	458	299
10	e4.5	e4.0	e4.0	e4.0	e4.9	e7.8	e11	e12	e12	619	441	288
11	e4.5	e4.0	e4.0	e4.0	e5.0	e7.9	e11	e12	e12	647	409	272
12	e4.5	e4.0	e4.0	e4.0	e5.1	e8.0	e11	e12	e12	717	368	260
13	e4.5	e4.0	e4.0	e4.0	e5.2	e8.1	e11	e12	e12	852	364	248
14	e4.5	e4.0	e4.0	e4.0	e5.3	e8.2	e11	e12	e12	1080	365	257
15	e4.5	e4.0	e4.0	e4.0	e5.4	e8.3	e11	e12	e12	1280	359	206
16	e4.5	e4.0	e4.0	e4.0	e5.5	e8.4	e12	e12	e12	1260	361	200
17	e4.5	e4.0	e4.0	e4.0	e5.6	e8.5	e12	e12	e12	1230	359	172
18	e4.5	e4.0	e4.0	e4.0	e5.7	e8.6	e12	e12	e12	1210	325	181
19	e4.5	e4.0	e4.0	e4.0	e5.8	e8.7	e12	e12	e12	1190	421	183
20	e4.5	e4.0	e4.0	e4.0	e5.9	e8.8	e12	e12	e12	1130	544	182
21	e4.5	e4.0	e4.0	e4.0	e6.1	e8.9	e12	e12	e12	1060	558	190
22	e4.5	e4.0	e4.0	e4.0	e6.2	e9.0	e12	e12	e12	892	566	186
23	e4.5	e4.0	e4.0	e4.0	e6.3	e9.1	e12	e12	e12	862	569	97
24	e4.5	e4.0	e4.0	e4.0	e6.4	e9.2	e12	e12	e12	878	574	e10
25	e4.5	e4.0	e4.0	e4.0	e6.5	e9.3	e12	e12	e12	872	573	e10
26	e4.5	e4.0	e4.0	e4.0	e6.6	e9.4	e12	e12	e12	631	571	e10
27	e4.5	e4.0	e4.0	e4.0	e6.7	e9.5	e12	e12	e12	482	573	e10
28	e4.5	e4.0	e4.0	e4.0	e6.8	e9.6	e12	e12	e12	454	576	e10
29	e4.0	e4.0	e4.0	e4.0	---	e9.7	e12	e12	e12	321	584	e10
30	e4.0	e4.0	e4.0	e4.0	---	e9.8	e12	e12	e12	348	578	e10
31	e4.0	---	e4.0	e4.0	---	e9.9	---	e12	---	363	581	---
TOTAL	198.0	120.0	124.0	124.0	150.6	260.4	340	372	360	20871	15259	6838
MEAN	6.39	4.00	4.00	4.00	5.38	8.40	11.3	12.0	12.0	673	492	228
MAX	22	4.0	4.0	4.0	6.8	9.9	12	12	12	1280	614	581
MIN	4.0	4.0	4.0	4.0	4.0	6.9	10	12	12	12	325	10
AC-FT	393	238	246	246	299	517	674	738	714	41400	30270	13560

CAL YR 1992 TOTAL 115520.0 MEAN 316 MAX 1310 MIN 4.0 AC-FT 229100  
WTR YR 1993 TOTAL 45017.0 MEAN 123 MAX 1280 MIN 4.0 AC-FT 89290

e Estimated

## 197

LOCATION.--Lat 42°24'06", long 111°21'22", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, sec. 6, T. 12 S., R. 44 E., Bear Lake County, Hydrologic Unit 16010202, on left bank at Pescadero, 400 ft downstream from road bridge, 2 mi downstream from Bennington Creek, and 6.5 mi northwest of Montpelier.

PERIOD OF RECORD.--October 1921 to September 1954. June 1969 to current year. Monthly discharge only for some periods, published in WSP 1314.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Bear Lake (station 10055500) and diversions above station for irrigation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,420 ft<sup>3</sup>/s July 15; minimum daily discharge, 47 ft<sup>3</sup>/s Oct. 10-12, Jan. 5.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	71	e60	e60	e57	e54	531	191	486	255	430	649
2	71	76	e59	e54	e58	e55	529	186	481	230	428	621
3	70	74	e57	e50	e57	e56	474	183	449	358	600	432
4	72	72	e55	e48	e56	e56	436	198	423	537	648	494
5	71	76	e58	e47	e55	e57	429	207	415	526	669	515
6	67	71	e62	e48	e57	e58	409	247	473	491	655	496
7	53	72	e64	e51	e59	e58	374	328	517	487	616	476
8	50	71	e69	e53	e59	e59	325	466	550	735	590	385
9	48	71	e70	e54	e59	e59	278	466	602	715	558	338
10	47	65	e70	e55	e59	e58	263	432	595	803	518	332
11	47	59	e68	e54	e57	e56	257	409	532	850	503	322
12	47	60	e67	e52	e54	e60	250	399	478	855	472	306
13	48	79	e67	e54	e52	e66	244	381	426	1030	454	291
14	48	72	e64	e56	e51	e80	234	355	397	1280	446	290
15	48	77	e58	e55	e56	e90	229	349	342	1420	440	308
16	50	77	e62	e55	e58	e110	213	354	323	1400	433	300
17	51	77	e64	e56	e61	e150	204	373	309	1370	434	273
18	50	78	e60	e58	e63	e200	185	385	308	1340	424	252
19	52	77	e59	e60	e65	e270	181	424	328	1340	393	260
20	50	79	e58	e61	e63	e300	178	439	340	1290	557	259
21	51	84	e60	e62	e60	e315	179	446	341	1210	630	257
22	51	82	e61	e60	e58	331	194	457	360	1130	647	260
23	50	e72	e59	e59	e55	312	183	448	364	1000	654	256
24	51	e66	e58	e58	e53	310	184	456	387	998	656	180
25	52	e60	e59	e58	e51	342	216	465	390	1010	656	118
26	53	e57	e60	e57	e50	411	237	466	368	1000	656	102
27	54	e60	e59	e57	e52	555	234	458	346	728	654	98
28	55	e60	e61	e56	e53	644	222	437	322	598	656	94
29	59	e59	e62	e56	---	655	204	450	301	556	652	91
30	68	e58	e58	e54	---	691	192	505	286	424	647	91
31	71	---	e58	e56	---	705	---	521	---	440	650	---
TOTAL	1726	2112	1906	1714	1589	7223	8268	11881	12239	26406	17426	9150
MEAN	55.7	70.4	61.5	55.3	56.7	233	276	383	408	852	562	305
MAX	72	84	70	62	65	705	531	521	602	1420	669	649
MIN	47	57	55	47	50	54	178	183	286	230	393	91
AC-FT	3420	4190	3780	3400	3150	14330	16400	23570	24280	52380	34560	18150

MEAN	467	475	492	455	401	390	437	571	935	1182	1011	677
MAX	2039	2134	1788	1340	1710	1707	1678	2106	3413	2918	1955	1696
(WY)	1984	1984	1985	1924	1985	1985	1986	1986	1986	1983	1983	1984
MIN	35.7	58.0	58.1	36.4	29.8	25.4	84.5	184	340	516	511	43.2
(WY)	1978	1935	1936	1936	1936	1936	1990	1989	1932	1938	1936	1977

## WATER YEARS 1923 - 1993

e Estimated

## BEAR RIVER BASIN

10075000 BEAR RIVER AT SODA SPRINGS, ID

LOCATION.--Lat 42°36'50", long 111°34'58", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 29, T. 9 S., R. 42 E., Caribou County, Hydrologic Unit 16010202, on left bank 800 ft upstream from Bailey Creek road bridge and 2 mi south of Soda Springs.

DRAINAGE AREA.--3,972 mi<sup>2</sup>.

PERIOD OF RECORD.--May to September 1896, May, June 1898, and October 1953 to current year in reports of Geological Survey. Irrigation season only during 1944-49, 1951-53 in reports of Bear River Hydrometric Data (Geological Survey open-file report).

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,760 ft above sea level, from topographic map. May 25 to Oct. 2, 1896, May 22 to July 1, 1898, staff gage at different datum. During irrigation season 1944-49, 1950-53, water-stage recorder at site 800 ft downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--40 years, 722 ft<sup>3</sup>/s, 523,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,380 ft<sup>3</sup>/s June 9, 15, 1896, gage height, 8.40 ft, datum then in use; minimum discharge, 41 ft<sup>3</sup>/s Nov. 16, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,430 ft<sup>3</sup>/s July 16; minimum daily discharge, 75 ft<sup>3</sup>/s Nov. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	122	101	102	102	105	741	375	864	436	513	692
2	96	128	104	102	103	100	738	374	859	393	490	686
3	98	123	106	102	104	105	687	372	826	392	545	598
4	99	123	102	102	108	109	652	442	784	607	674	498
5	100	126	97	102	114	109	648	470	786	710	700	578
6	102	123	95	102	108	112	614	662	825	665	709	560
7	101	121	100	102	107	126	564	758	876	626	680	546
8	94	121	99	102	106	127	528	810	869	695	673	500
9	96	122	106	103	110	127	491	764	881	834	645	414
10	91	120	106	103	118	128	455	704	879	816	603	393
11	94	115	104	103	110	129	433	685	847	894	570	381
12	94	115	109	103	116	144	411	690	780	908	560	366
13	94	122	105	103	110	153	399	702	734	954	524	346
14	95	127	101	103	118	171	386	711	679	1180	505	342
15	96	125	101	103	115	151	376	747	631	1380	496	355
16	96	129	101	103	107	156	375	792	573	1430	489	352
17	99	130	101	103	105	180	360	808	552	1410	482	362
18	100	131	101	103	107	209	404	814	554	1370	482	328
19	100	130	101	103	118	216	383	888	552	1360	461	324
20	100	128	101	103	128	216	363	918	563	1340	474	321
21	100	109	101	103	117	243	345	934	566	1260	664	316
22	100	100	101	103	113	288	348	941	584	1190	691	316
23	101	97	101	103	106	295	371	913	584	1100	697	317
24	101	78	102	104	109	347	370	896	573	1050	699	298
25	101	75	102	106	111	446	371	900	597	1050	688	208
26	101	105	102	107	109	575	401	900	568	1120	691	172
27	102	119	102	103	111	696	419	888	545	917	687	163
28	106	110	102	103	108	817	409	868	512	715	691	161
29	113	114	102	105	---	857	396	873	489	665	692	158
30	122	117	102	103	---	847	388	914	460	582	683	153
31	127	---	102	102	---	845	---	910	---	489	687	---
TOTAL	3117	3505	3160	3194	3098	9129	13826	23423	20392	28538	18845	11204
MEAN	101	117	102	103	111	294	461	756	680	921	608	373
MAX	127	131	109	107	128	857	741	941	881	1430	709	692
MIN	91	75	95	102	102	100	345	372	460	392	461	153
AC-FT	6180	6950	6270	6340	6140	18110	27420	46460	40450	56610	37380	22220

CAL YR 1992 TOTAL 159718 MEAN 436 MAX 1500 MIN 75 AC-FT 316800  
WTR YR 1993 TOTAL 141431 MEAN 387 MAX 1430 MIN 75 AC-FT 280500

## 199

LOCATION.—Lat 42°38'41", long 111°42'44", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 17, T. 9 S., R. 41 E., Caribou County, Hydrologic Unit 16010202, 0.5 mi Southeast of Alexander, 5 mi downstream from Soda Creek.

GAGE.--Elevation of gage is 5,600 ft, Utah Power and Light Co. datum.

PERIOD OF RECORD.--October 1924 to current year. Prior to 1986, published in reports of the Bear River Commission.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 14,300 acre-ft May 24, elevation, 5,719.66 ft; minimum, 9,846 acre-ft Mar. 18, elevation, 9,714.77 ft.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13630	13350	12890	12690	12520	12790	13340	13350	13330	13820	12820	13260
2	12880	13420	12640	12680	12530	12770	12690	13220	13070	13750	13590	13280
3	12930	13450	12640	12680	12530	12770	13520	13120	12960	13560	12380	13230
4	12940	13460	12640	12670	12530	12770	13170	13220	12810	13590	12430	12970
5	12950	13480	12610	12660	12540	12780	12830	12940	12910	14000	12590	12970
6	12950	13500	12610	12650	12540	12780	12540	13210	12980	14190	12780	12940
7	12910	13550	12610	12650	12540	12820	12410	13270	13120	13770	12970	12860
8	12890	13570	12610	12650	12560	12860	12240	13070	13360	13460	13100	12790
9	12840	13610	12640	12660	12560	12880	12210	13600	13580	13550	13160	12720
10	12860	13610	12640	12660	12600	12930	12110	13460	13550	13520	13170	12540
11	12790	13620	12640	12650	12610	12970	12520	13120	13370	13250	13130	12330
12	12820	13620	12660	12650	12640	12810	11650	13100	13000	13050	13060	12140
13	12800	13620	12670	12640	12640	11880	11940	13010	12690	12870	12930	11960
14	12800	13620	12650	12620	12660	12010	12220	12990	12590	13020	12790	11890
15	12780	13650	12650	12610	12680	11810	12030	12970	12480	13090	12790	11890
16	12790	13670	12660	12610	12680	11020	12600	13100	12470	13120	12820	11960
17	12790	13690	12660	12610	12670	10280	12740	13240	12410	13010	12920	12030
18	12830	13710	12670	12610	12660	9846	12910	13200	12810	12920	13050	12200
19	12860	13740	12670	12590	12670	10050	13160	14120	13040	12770	13060	12340
20	12900	13770	12670	12570	12720	10600	13300	14080	13280	13020	12740	12430
21	12900	13780	12670	12580	12740	9916	13380	14140	13380	13160	12890	12500
22	12930	13780	12670	12570	12750	10110	13470	14190	13460	13130	13070	12580
23	12960	13780	12670	12560	12750	10240	13620	14220	13540	13070	13220	12810
24	12960	13700	12660	12530	12760	10290	13220	14300	13560	12980	13260	12990
25	12980	13500	12670	12500	12780	10030	13420	14210	13640	12960	13260	13120
26	13010	13350	12670	12500	12790	10030	13620	14150	13620	13020	13260	13220
27	13020	13200	12660	12510	12790	10430	13820	14080	13540	13080	13260	13350
28	13050	13020	12670	12510	12790	10930	13620	14180	13400	13300	13260	13400
29	13190	12900	12680	12510	---	11690	13490	13890	13490	13300	13260	13300
30	13290	12740	12700	12510	---	12330	13420	13660	13730	13260	13260	13140
31	13320	---	12700	12520	---	12860	---	13470	---	13030	13270	

CAL YR 1992	.	.	.	.	.	(*)	+220
WTR YR 1993	.	.	.	.	.	(*)	-690

(#) Elevation, in feet, at end of month.  
(\* ) Change in contents, in acre-feet.



## BEAR RIVER BASIN

10079500 BEAR RIVER AT ALEXANDER, ID

LOCATION.--Lat 42°38'42", long 111°41'51", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 17, T. 9 S., R. 41 E., Caribou County, Hydrologic Unit 16010202, on right bank 600 ft downstream from Soda hydroelectric plant of Utah Power & Light Co., 0.5 mi southeast of Alexander, and 5 mi downstream from Soda Creek.

DRAINAGE AREA.--4,099 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1911 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,650 ft above sea level from topographic map.

REMARKS.--Records fair. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--81 years, 806 ft<sup>3</sup>/s, 583,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,740 ft<sup>3</sup>/s Mar. 31, 1911; maximum gage height, 15.95 ft Dec. 11, 1919 (backwater from ice); minimum, 14 ft<sup>3</sup>/s Oct. 22, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,740 ft<sup>3</sup>/s July 17; minimum daily discharge, 105 ft<sup>3</sup>/s Oct. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	417	161	185	129	136	154	689	471	1020	403	677	848
2	393	165	157	128	137	154	778	472	1020	482	682	844
3	105	166	156	128	137	154	972	477	970	501	688	799
4	119	167	151	127	138	154	973	561	885	517	695	766
5	128	168	147	127	138	155	964	548	777	507	702	719
6	140	169	151	126	139	157	823	680	778	672	709	713
7	146	170	152	128	139	158	751	825	779	788	719	708
8	139	171	151	129	140	160	674	756	776	793	729	640
9	134	172	149	129	141	162	621	852	813	794	738	580
10	133	173	148	127	141	162	612	945	965	909	759	572
11	129	174	148	125	142	162	610	833	998	1060	770	564
12	124	175	144	124	142	437	459	766	991	1070	774	557
13	125	176	139	126	143	452	315	772	826	1080	780	487
14	125	177	138	125	144	162	322	768	739	1230	692	404
15	126	177	138	123	145	444	317	743	649	1530	648	384
16	126	176	137	122	146	634	338	749	603	1650	595	381
17	126	170	137	121	147	632	324	859	456	1740	562	363
18	127	162	135	120	149	333	323	486	374	1680	559	310
19	127	160	135	119	150	137	325	715	414	1580	692	307
20	127	159	134	119	151	309	325	930	419	1390	785	326
21	129	158	134	118	151	537	325	924	568	1410	782	323
22	131	157	133	121	152	274	322	955	539	1410	779	250
23	130	157	133	121	153	272	517	973	548	1350	838	208
24	128	196	132	121	153	508	458	907	562	1280	894	206
25	127	243	137	116	154	641	305	967	579	1230	888	142
26	125	242	136	124	154	639	309	967	584	1230	882	108
27	126	242	134	131	154	637	464	968	579	1000	876	111
28	128	241	135	130	154	650	563	880	549	714	870	109
29	137	240	133	131	---	664	472	1020	385	707	863	254
30	145	237	131	133	---	672	476	1020	352	671	856	234
31	153	---	129	135	---	683	---	1020	---	672	850	---
TOTAL	4575	5501	4399	3883	4070	11449	15726	24809	20497	32050	23333	13217
MEAN	148	183	142	125	145	369	524	800	683	1034	753	441
MAX	417	243	185	135	154	683	973	1020	1020	1740	894	848
MIN	105	157	129	116	136	137	305	471	352	403	559	108
AC-FT	9070	10910	8730	7700	8070	22710	31190	49210	40660	63570	46280	26220

CAL YR 1992 TOTAL 177117 MEAN 484 MAX 1710 MIN 72 AC-FT 351300  
WTR YR 1993 TOTAL 163509 MEAN 448 MAX 1740 MIN 105 AC-FT 324300

BEAR RIVER BASIN

201

10080000 BEAR RIVER BELOW GRACE DAM, NEAR GRACE, ID

LOCATION.--Lat 42°35'11", long 111°43'51", in NE1/4, SE1/4, NW1/4 sec. 1, T. 10 S., R. 40 E., Caribou County, Hydrologic Unit 16010202, on left bank 1,000 ft downstream from dam, and 1 mi north of Grace.

PERIOD OF RECORD.--April 1922 to November 1923 (fragmentary); March 1924 to current year. 1945 to 1950 published in reports on Bear River Hydrometric Data, water year 1946 published in WSP 1060. Prior to 1986, not published, records available from Utah Power & Light Co.

GAGE.--Water-stage recorder. Elevation of gage is 5,550 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

COOPERATION.--Records collected by Utah Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,390 ft<sup>3</sup>/s June 10, 1986, gage height, 6.77 ft; minimum, 0.74 ft<sup>3</sup>/s Feb. 2, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 152 ft<sup>3</sup>/s Oct. 31; minimum daily, 1.4 ft<sup>3</sup>/s Dec. 3-10, 30-Jan. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	140	1.5	1.4	3.4	2.3	4.1	5.4	e7.8	35	35	20
2	21	141	1.5	1.5	2.6	2.3	12	6.0	e7.7	40	35	19
3	16	142	1.4	1.5	2.6	2.2	1.9	6.1	e7.7	38	35	20
4	17	143	1.4	1.9	2.7	2.0	1.9	4.9	e7.6	47	37	19
5	12	144	1.4	2.0	2.7	2.0	2.0	6.2	e7.6	47	35	20
6	5.3	146	1.4	2.4	2.8	2.0	2.0	5.4	e7.5	64	24	18
7	4.7	147	1.4	3.2	6.2	2.0	2.0	6.9	7.6	64	23	20
8	4.2	148	1.4	2.3	4.2	2.0	2.0	7.8	7.6	63	20	19
9	2.3	150	1.4	1.6	2.9	2.1	2.0	8.0	11.9	73	19	20
10	1.7	151	1.4	1.7	2.5	2.0	2.0	10	8.7	64	20	21
11	1.5	142	1.5	1.9	4.8	1.9	2.0	11	7.3	61	20	21
12	1.5	147	1.5	1.7	3.2	1.9	2.0	7.6	7.0	61	20	21
13	1.5	131	1.5	2.8	2.7	4.9	2.0	7.7	6.8	60	20	21
14	1.5	129	1.5	2.2	2.4	3.0	2.0	7.1	6.5	61	19	21
15	1.5	129	1.5	2.1	2.3	2.7	2.2	7.3	11	61	19	22
16	1.5	130	1.7	2.0	2.0	2.5	2.3	e7.7	14	67	19	22
17	1.5	66	1.9	2.4	2.7	2.5	2.3	e7.2	11	60	19	22
18	1.5	2.5	1.6	1.6	2.6	2.2	2.6	e7.5	23	56	19	22
19	1.2	1.9	1.3	1.3	2.1	1.9	2.2	e7.7	28	60	21	22
20	87	2.0	1.8	1.8	2.6	2.5	2.4	e8.0	29	61	20	22
21	107	1.7	1.8	1.7	2.4	2.3	2.9	e8.2	30	55	20	23
22	110	1.7	1.9	1.9	2.6	2.3	2.9	e8.5	27	57	20	21
23	110	1.7	1.9	1.7	2.4	2.4	5.1	e12	25	57	19	20
24	110	1.6	1.9	1.5	2.0	2.4	2.9	e71	30	55	20	10
25	110	1.7	1.9	1.8	2.5	2.8	2.4	e11	62	54	19	1.6
26	110	1.5	1.5	2.2	2.0	2.7	2.7	e8.1	62	53	19	1.5
27	110	1.3	1.9	2.3	2.2	2.3	2.8	e8.0	61	43	19	1.5
28	111	1.5	1.9	2.4	2.3	2.2	3.2	e8.0	64	35	20	1.5
29	122	1.5	1.9	2.2	---	2.1	5.6	e7.9	85	35	25	1.8
30	149	1.5	1.4	2.4	---	1.9	4.2	e7.9	42	35	21	1.9
31	152	---	1.4	3.5	---	1.8	---	e7.8	---	35	19	---
TOTAL	1514.2	2348.3	46.8	63.1	78.4	72.1	88.6	303.9	712.4	1657	700	495.8
MEAN	48.8	78.3	1.51	2.04	2.80	2.33	2.95	9.80	23.7	53.5	22.6	16.5
MAX	152	151	1.9	3.5	6.2	4.9	12	71	85	73	37	23
MIN	1.5	1.5	1.4	1.4	2.0	1.8	1.9	4.9	6.5	35	19	1.5
AC-FT	3000	4660	93	125	156	143	176	603	1410	3290	1390	983

CAL YR 1992 TOTAL 9960.9 MEAN 27.2 MAX 404 MIN 1.4 AC-FT 19760  
WTR YR 1993 TOTAL 8080.6 MEAN 22.1 MAX 152 MIN 1.4 AC-FT 16030

e Estimated

## BEAR RIVER BASIN

10086000 ONEIDA NARROWS RESERVOIR AT ONEIDA, ID

LOCATION.--Lat 42°16'34", long 111°44'56", in SW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub> sec. 23, T. 13 S, R. 40 E., Franklin County, Hydrologic Unit 16010202, 6 mi south of Cleveland.

DRAINAGE AREA (REVISED).--4,455 mi<sup>2</sup>.

REVISED RECORDS.--WRD UT-74-1, WDR UT-89-1: Drainage area; WDR UT-88-1: 1987.

PERIOD OF RECORD.--October 1914 to current year. Prior to 1986, published in reports of Bear River Commission.

GAGE.--Elevation of gage is 4,800 ft, Utah Power and Light Co. datum.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 10,700 acre-ft Sept. 26, elevation, 4882.40 ft; minimum, 8,823 acre-ft, Sept. 30, elevation, 4,876.90 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10130	10360	10390	10170	10310	10330	9478	10290	10050	9976	10260	9918
2	10400	10360	10350	10240	10320	10360	10050	10390	10370	9797	10390	9928
3	10700	10330	10380	10190	10340	10370	10090	10030	10290	9815	10400	9883
4	10400	10310	10260	10170	10310	10330	10400	10280	10090	9852	10370	10200
5	10460	10290	10240	10180	10310	10310	10270	9987	10080	9842	10420	10410
6	10470	10270	10290	10230	10310	10290	10290	10120	10040	9911	9887	10300
7	10460	10250	10350	10280	10340	10290	10240	10200	9990	10120	10230	10470
8	10350	10260	10350	10350	10320	10290	10190	10470	10150	10220	10310	10180
9	10160	10270	10400	10370	10340	10310	10510	10240	10030	9859	10330	10440
10	10170	10270	10380	10360	10330	10330	10340	10290	9966	9546	10350	10420
11	10190	10250	10390	10320	10330	10370	10500	9866	10060	9925	10380	10260
12	10190	10240	10420	10320	10300	10330	10250	10340	10290	9845	10350	10080
13	10200	10240	10260	10300	10270	10460	10090	10410	10000	9634	10230	10400
14	10200	10240	10160	10310	10260	10300	9914	9907	9870	9276	10190	10540
15	10200	10240	10260	10360	10270	10280	10070	10210	10010	9093	10210	10610
16	10190	10240	10290	10390	10280	10440	10110	10220	9945	9173	10320	10630
17	10190	10260	10290	10380	10250	10420	10300	10200	9935	9644	10350	10470
18	10190	10260	10340	10380	10250	10490	10220	10440	10040	9832	10210	10560
19	10220	10300	10380	10370	10440	10270	10300	10350	9990	9774	9624	10510
20	10240	10260	10330	10330	10450	10550	9818	10230	10190	10270	9688	10590
21	10120	10280	10310	10380	10370	10450	10140	10650	10340	10110	9186	10510
22	10190	10280	10330	10330	10280	10440	9907	10580	10160	10080	9240	10640
23	10250	10320	10340	10330	10340	10430	10320	10510	10230	10450	9573	10500
24	10300	10310	10340	10290	10340	10110	10150	10470	10080	10330	9627	10460
25	10330	10250	10330	10280	10290	10350	10130	10400	9990	10340	9220	10530
26	10340	10350	10280	10240	10330	10250	10060	10230	10120	10280	9617	10700
27	10360	10480	10290	10170	10310	10120	10110	10340	10320	10320	10030	10300
28	10370	10530	10300	10200	10310	9839	9825	10010	10070	10270	10160	10190
29	10330	10480	10200	10230	---	9726	10260	9876	10060	10170	10400	9273
30	10360	10350	10230	10280	---	9610	10260	10370	9966	10290	9804	8823
31	10390	---	10190	10320	---	9529	---	10090	---	10270	9556	---
MAX	10700	10530	10420	10390	10450	10550	10510	10650	10370	10450	10420	10700
MIN	10120	10240	10160	10170	10250	9529	9478	9866	9870	9093	9186	8823

(#) 4881.51 4881.40 4880.94 4881.33 4881.28 4879.02 4881.16 4880.67 4880.30 4881.17 4879.10 4876.90  
(\*) +210 -40 -160 +130 -10 -781 +731 -170 -124 +304 -714 -733

CAL YR 1992 : : : : (\*) +120

WTR YR 1993 : : : : (\*) -1357

(#) Elevation, in feet, at end of month.

(\*) Change in contents, in acre-feet.

## 203

LOCATION.--Lat 42°16'00", long 111°45'04", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 26, T. 13 S., R. 40 E., Franklin County,  
Hydrologic Unit 16010202, on right bank 200 ft downstream from tailrace of Oneida plant and 6 mi south of  
Cleveland.

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only October 1921 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 4,800 ft above sea level, from topographic map.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,480 ft<sup>3</sup>/s May 8, 1922; minimum, 3.0 ft<sup>3</sup>/s June 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,730 ft<sup>3</sup>/s May 22; minimum daily discharge, 130 ft<sup>3</sup>/s Oct. 1.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	312	280	264	253	217	701	948	1440	262	586	821
2	134	310	278	275	256	219	1030	680	1270	369	675	845
3	248	308	219	289	261	246	999	881	1290	239	387	836
4	395	306	238	261	272	277	1380	998	1140	247	581	564
5	303	304	194	216	243	271	1240	1290	1000	250	1030	733
6	285	301	178	197	244	270	1230	1270	1070	252	367	752
7	331	299	189	219	245	265	1020	1640	926	472	371	657
8	321	297	213	254	279	261	1110	1540	1110	258	634	677
9	274	296	220	290	265	259	829	1290	1160	876	602	572
10	231	295	229	301	290	256	928	1490	921	758	833	699
11	231	294	195	298	264	268	919	1390	1510	586	443	1000
12	230	293	270	282	290	286	961	1400	1210	968	697	490
13	243	278	251	274	286	495	856	1460	1360	994	738	566
14	230	270	213	259	269	547	505	1650	1200	994	744	328
15	231	270	195	263	241	294	639	1210	849	863	660	591
16	232	270	295	274	236	593	606	1480	852	1030	600	676
17	233	268	294	285	236	862	378	1480	632	1050	515	444
18	234	266	279	297	221	1020	1180	1580	580	1090	637	622
19	235	266	267	285	201	649	577	917	257	979	741	404
20	244	268	287	266	251	552	807	1710	262	976	835	430
21	262	268	284	257	307	778	466	1380	561	1010	684	488
22	189	267	282	286	314	810	925	1730	389	876	858	375
23	206	234	293	283	249	602	734	1600	367	1010	729	620
24	209	232	293	279	255	706	731	1450	472	993	782	175
25	217	236	291	271	291	992	824	1510	366	961	765	365
26	230	241	287	257	258	1340	687	1240	304	1120	711	447
27	238	272	281	237	219	1320	768	1420	410	1080	592	496
28	244	366	291	224	218	1170	933	1510	500	616	681	528
29	298	366	337	221	---	1370	916	1040	327	654	912	863
30	282	335	297	213	---	1340	879	1150	361	590	1170	635
31	291	---	285	211	---	1120	---	1370	---	585	650	---
TOTAL	7661	8588	8005	8088	7214	19655	25758	41704	24096	23008	21210	17699
MEAN	247	286	258	261	258	634	859	1345	803	742	684	590
MAX	395	366	337	301	314	1370	1380	1730	1510	1120	1170	1000
MIN	130	232	178	197	201	217	378	680	257	239	367	175
AC-FT	15200	17030	15880	16040	14310	38990	51090	82720	47790	45640	42070	35110

CAL YR 1992	TOTAL 181879	MEAN 497	MAX 1430	MIN 63	AC-FT 360800
WTR YR 1993	TOTAL 212686	MEAN 583	MAX 1730	MIN 130	AC-FT 421900

## BEAR RIVER BASIN

## 10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE

LOCATION.--Lat 42°00'47", long 111°55'14", in NW1/4, NE1/4, sec. 29, T. 16 S., R. 39 E., Franklin County, Idaho, Hydrologic Unit 16010202, on left bank 1,050 ft downstream from inlet canal to Cub River pumps, 1.1 mi downstream from Weston Creek, 1.8 mi upstream from Idaho-Utah State line, and 3.5 mi southeast of Weston.

DRAINAGE AREA.--4,881 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,420 ft above sea level, from topographic map. Prior to Sept. 10, 1982 at datum 2.00 ft higher. Sept. 10, 1982 to Sept. 30, 1985 at datum 10.0 ft lower.

REMARKS.--Records fair. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft<sup>3</sup>/s June 14, 1984, gage height, 9.20 ft; minimum daily discharge, 48 ft<sup>3</sup>/s May 29, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,650 ft<sup>3</sup>/s May 7; minimum daily discharge, 154 ft<sup>3</sup>/s July 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	285	444	406	422	286	1320	901	1650	200	503	374
2	196	297	421	414	399	285	840	1120	1350	204	369	585
3	228	299	351	488	385	301	1380	955	1730	202	459	610
4	472	292	317	472	408	326	1240	1090	1690	159	331	482
5	215	290	435	442	373	309	1700	1530	1430	168	350	393
6	281	288	458	434	379	307	1490	1750	1440	171	808	569
7	307	286	410	449	420	304	1320	2650	1550	154	245	531
8	307	284	452	430	415	296	1240	2130	1410	298	367	617
9	305	282	471	477	391	294	937	2190	1570	429	498	491
10	248	282	394	488	362	298	1110	1860	1570	532	423	453
11	236	282	337	512	328	314	924	2050	1710	334	471	527
12	236	282	284	496	341	327	1070	1910	1750	495	472	744
13	234	282	418	449	335	394	1030	1860	2080	639	566	344
14	240	272	375	507	334	696	895	2380	1700	701	370	381
15	234	265	348	529	318	410	516	1890	1350	706	361	293
16	235	263	305	496	314	559	743	2030	1220	701	344	412
17	238	263	339	411	300	1120	575	2170	1110	631	277	525
18	230	266	407	346	300	1370	854	2160	821	754	233	376
19	229	264	393	349	286	1260	951	2120	698	871	439	517
20	232	266	447	342	365	818	1030	1800	440	476	299	357
21	240	270	530	323	384	1090	596	2100	392	695	678	474
22	221	266	475	340	381	1180	894	2220	699	670	436	398
23	206	269	450	348	321	914	598	2270	481	583	419	412
24	208	231	434	345	339	1240	1020	2090	555	996	473	495
25	212	244	426	336	361	1130	886	2010	537	852	739	260
26	219	263	411	329	305	1900	816	2110	445	936	420	342
27	230	293	474	300	287	1950	753	1680	334	896	399	483
28	239	394	439	340	288	1910	996	1940	505	807	413	382
29	281	581	488	390	---	1570	745	1720	372	622	416	831
30	296	541	387	388	---	1660	938	1380	297	511	872	663
31	290	---	324	389	---	1220	---	1850	---	533	844	---
TOTAL	7746	8942	12644	12765	9841	26038	29407	57916	32886	16926	14294	14321
MEAN	250	298	408	412	351	840	980	1868	1096	546	461	477
MAX	472	581	530	529	422	1950	1700	2650	2080	996	872	831
MIN	196	231	284	300	286	285	516	901	297	154	233	260
AC-FT	15360	17740	25080	25320	19520	51650	58330	114900	65230	33570	28350	28410

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1993, BY WATER YEAR (WY)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	1060	1088	1116	1111	1105	1270	1528	1649	1479	1140	1000	1028											
MAX	2850	2983	2552	1904	2556	3264	3594	3968	4263	3442	2416	2545											
(WY)	1984	1984	1985	1984	1986	1986	1986	1986	1986	1983	1984	1986											
MIN	250	298	310	412	351	351	403	357	333	473	461	192											
(WY)	1993	1993	1982	1993	1993	1991	1992	1988	1989	1982	1993	1992											

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1971 - 1993

ANNUAL TOTAL	175616	243726	1215
ANNUAL MEAN	480	668	2728
HIGHEST ANNUAL MEAN			1984
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	1230	2650	4830
LOWEST DAILY MEAN	141	154	48
ANNUAL SEVEN-DAY MINIMUM	154	180	69
ANNUAL RUNOFF (AC-FT)	348300	483400	880000
10 PERCENT EXCEEDS	781	1650	2400
50 PERCENT EXCEEDS	451	435	993
90 PERCENT EXCEEDS	229	263	326

## BEAR RIVER BASIN

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10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE--Continued

## WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: May 1986 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 18,600 mg/L, Mar. 24, 1989; minimum daily mean, 6 mg/L, Oct. 22, 1990, Nov. 11, 1992.

SEDIMENT LOADS: Maximum daily, 59,900 tons, Mar. 12, 1989; minimum daily, 2.3 tons, Oct. 19, 1989, Oct. 22, 1990.

EXTREMES FOR CURRENT YEAR:

SEDIMENT CONCENTRATION: Maximum daily mean, 741 mg/L, May. 7; minimum daily mean, 6 mg/L, Nov. 11.

SEDIMENT LOADS: Maximum daily, 5,510 tons, May 7; minimum daily, 4.6 tons, Nov. 11.

## SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	23	12	65	50	e65	e78	e62	e68	e34	e39	e37	e28
2	27	14	66	53	e54	e61	e61	e69	e35	e38	e37	e29
3	e29	e18	71	57	e45	e43	e63	e84	e34	e35	e42	e34
4	e33	e43	32	25	e38	e32	e56	e72	e45	e49	e44	e38
5	e21	e12	21	16	e43	e51	e46	e55	e39	e39	e39	e32
6	e23	e17	22	17	e46	e57	e41	e49	e38	e39	e37	e31
7	e20	e17	23	18	e40	e44	e45	e55	e38	e43	e36	e30
8	e21	e17	24	18	e38	e46	e39	e45	e39	e44	e34	e27
9	e21	e17	18	14	e51	e65	e41	e53	e37	e39	e33	e26
10	e20	e13	14	11	e54	e57	e44	e58	e41	e40	e34	e27
11	e20	e13	6	4.6	e35	e32	e47	e66	e37	e32	e36	e30
12	e20	e13	14	11	e30	e24	e45	e61	e46	e43	e37	e32
13	e20	e13	9	7.0	e40	e45	e32	e38	e44	e39	e89	e95
14	e20	e13	11	8.3	e34	e35	e25	e34	e42	e38	e214	e401
15	e20	e13	12	8.7	e30	e28	e19	e26	e36	e31	e135	e150
16	e20	e13	12	8.9	e32	e27	e22	e29	e35	e30	e159	e242
17	e20	e13	18	13	e39	e35	e22	e25	e38	e31	e210	e635
18	e20	e12	18	13	e50	e55	e19	e18	e40	e33	e251	e929
19	e20	e12	12	8.5	e46	e48	e18	e17	e36	e28	e239	e813
20	e20	e13	15	11	e50	e60	e18	e17	e58	e57	e174	e383
21	e20	e13	20	15	e61	e87	e19	e17	e55	e57	e208	e613
22	e18	e11	11	7.8	e57	e73	e16	e15	e41	e42	e254	e808
23	e21	e12	15	11	e55	e66	e19	e17	e36	e31	e241	e594
24	e25	e14	e15	e9.1	e53	e62	e17	e16	e42	e38	e288	e964
25	e30	e17	e23	e15	e52	e60	e18	e16	e45	e44	367	1210
26	e34	e20	e26	e18	e57	e64	e27	e24	e33	e28	385	2000
27	e39	e24	e28	e22	e59	e75	e31	e25	e36	e28	274	1490
28	42	27	e50	e54	e59	e70	e28	e26	e39	e30	246	1270
29	90	70	e74	e116	e64	e84	e34	e36	---	---	163	709
30	71	57	e74	e108	e58	e60	e31	e33	---	---	138	662
31	57	44	---	---	e58	e51	e29	e30	---	---	375	1250
TOTAL	---	617	---	748.9	---	1675	---	1194	---	1065	---	15582

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	255	984	115	265	55	254	e47	e25	e91	e123	115	120
2	e218	e499	141	432	31	120	e61	e34	e65	e65	104	166
3	e309	e1150	361	764	61	311	e61	e33	60	103	111	190
4	e304	e1020	265	798	69	328	e56	e24	59	57	106	135
5	e317	e1450	132	569	96	379	e56	e26	62	64	82	93
6	e262	e1050	323	1590	50	210	e59	e27	81	274	96	153
7	e235	e835	741	5510	77	339	e67	e28	42	28	92	138
8	e235	e785	420	2430	74	282	e73	e59	152	155	75	151
9	e171	e432	282	1710	30	126	e109	e128	149	200	111	165
10	e194	e579	148	754	52	227	e101	e144	87	104	75	97
11	e156	e389	136	754	54	271	e94	e83	64	95	74	125
12	e176	e511	126	672	39	196	e115	e135	101	120	187	435
13	e164	e457	177	944	69	396	e116	e199	e115	e244	62	59
14	e228	e550	247	1700	53	263	e132	e250	e149	e153	69	77
15	e213	e298	163	844	48	179	79	179	e95	e110	71	58
16	219	462	173	986	45	154	162	264	e96	e105	82	98
17	304	514	184	1090	58	179	157	231	e39	e36	80	122
18	160	387	86	577	49	113	175	345	27	20	59	63
19	519	1460	38	218	40	77	205	476	88	118	62	88
20	159	438	63	345	34	41	151	198	109	100	82	83
21	108	176	47	274	28	30	213	358	214	382	111	153
22	136	365	55	335	86	194	158	258	181	220	85	93
23	79	131	54	345	51	66	141	201	152	189	79	92
24	126	348	55	324	112	183	e145	e390	119	165	111	157
25	125	322	81	417	52	77	e118	e271	137	288	75	54
26	211	427	97	540	34	42	e116	e294	102	117	104	102
27	97	232	62	283	26	23	e111	e268	89	108	102	137
28	113	348	70	363	55	77	e99	e215	83	97	82	87
29	87	203	40	188	75	76	e96	e162	103	125	166	432
30	109	276	34	134	82	65	e91	e125	191	460	125	239
31	---	---	53	266	---	---	e92	e132	188	459	---	---
TOTAL	---	17078	---	26421	---	5278	---	5582	---	4884	---	4162

YEAR 84286.9

e Estimated



## BEAR RIVER BASIN

10102250 BEAR RIVER NEAR SMITHFIELD, UT

LOCATION.--Lat 41°50'24", long 111°52'51", in NW¼, SW¼, NE¼, sec. 30, R. 1 E., T. 13 N., Cache County, Cache Hydrologic Unit 16010202, on the left abutment of abandoned highway bridge, 0.6 miles upstream from the mouth of Summit Creek, and 2.6 miles west of Smithfield.

DRAINAGE AREA.--5,193 mi<sup>2</sup>.

REVISED RECORDS.--WRD UT-1974: Drainage area.

PERIOD OF RECORD.--April 1964 to September 1978, October 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,399.89 ft above sea level (Utah State Highway benchmark).

REMARKS.--Records poor. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,850 ft<sup>3</sup>/s June 13, 14, 1971, gage height, 14.46 ft; minimum, 75 ft<sup>3</sup>/s Apr. 26, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,200 ft<sup>3</sup>/s May 24; minimum daily discharge, 160 ft<sup>3</sup>/s Nov. 25.

REVISIONS.--Revised daily discharges, in cubic feet per second, for September 1992, are given below. These figures supercede those published in the report for 1992.

September 1 . . . 374	September 9 . . . 291	September 17 . . . 202	September 25 . . . 189
2 . . . 309	10 . . . 293	18 . . . 189	26 . . . 195
3 . . . 307	11 . . . 293	19 . . . 188	27 . . . 184
4 . . . 301	12 . . . 270	20 . . . 183	28 . . . 195
5 . . . 303	13 . . . 253	21 . . . 176	29 . . . 205
6 . . . 289	14 . . . 242	22 . . . 171	30 . . . 220
7 . . . 281	15 . . . 225	23 . . . 169	
8 . . . 287	16 . . . 231	24 . . . 163	

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	331	400	423	505	431	e1760	e1350	2490	526	725	718
2	233	292	352	471	532	440	e1520	1380	2400	383	684	593
3	230	263	372	477	558	408	e1450	1360	2340	408	657	674
4	325	238	338	486	554	416	1560	e1400	2370	409	550	725
5	422	232	339	461	528	414	e1680	e1540	2430	379	554	580
6	278	230	345	466	491	413	e1830	e1940	2310	358	764	628
7	344	227	358	489	519	424	e1780	e2320	2270	321	667	672
8	361	231	350	529	555	417	e1610	e2720	2270	358	479	660
9	355	230	386	548	565	431	1520	e2880	2260	340	601	725
10	351	228	417	589	547	442	e1310	e2780	2260	502	638	596
11	319	226	394	615	590	493	e1340	e2570	2220	526	653	655
12	311	227	376	601	586	497	1300	2520	2320	431	568	770
13	311	235	354	571	583	490	1370	2520	2470	544	615	721
14	309	230	369	540	562	628	e1310	2580	2590	670	623	525
15	303	218	347	586	564	701	e1020	2800	2500	707	538	532
16	301	218	343	629	538	638	e938	2960	2240	658	487	510
17	298	216	332	606	510	1070	e921	2980	2020	691	407	637
18	292	216	365	616	489	1730	831	e3080	1840	685	356	664
19	286	218	378	622	491	2060	e1270	3110	1580	778	399	670
20	284	224	369	630	476	2100	e1130	3110	1290	780	500	638
21	284	226	358	621	519	1980	e1190	2970	1060	653	483	582
22	292	234	397	599	514	1960	923	3110	1120	743	593	669
23	271	241	414	612	492	1830	e1180	3170	1140	743	588	556
24	264	222	430	598	463	1610	e1060	3200	1070	887	542	646
25	266	160	414	569	461	1620	e1180	3100	1060	1090	585	601
26	267	185	381	559	473	1810	1250	2990	931	1080	704	516
27	272	209	378	527	427	2180	e1150	2970	765	1110	527	511
28	285	240	443	456	416	2360	e1180	2850	739	1160	496	620
29	318	318	441	475	---	2330	e1290	2790	759	951	555	585
30	393	413	499	517	---	e2200	1260	2680	602	805	604	902
31	387	---	489	509	---	e2060	---	2480	---	747	906	---
TOTAL	9445	7178	11928	16997	14508	36583	39113	80210	53716	20423	18048	19081
MEAN	305	239	385	548	518	1180	1304	2587	1791	659	582	636
MAX	422	413	499	630	590	2360	1830	3200	2590	1160	906	902
MIN	230	160	332	423	416	408	831	1350	602	321	356	510
AC-FT	18730	14240	23660	33710	28780	72560	77580	159100	106500	40510	35800	37850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1993, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
MEAN	914	1003	1157	1249	1140	1383	1642	1887	1612	1007	916	919																			
MAX	2145	2034	2097	2262	2078	2585	2921	3536	4844	2153	1462	1855																			
(WY)	1975	1976	1972	1972	1972	1972	1976	1971	1971	1971	1971	1971																			
MIN	280	239	377	411	450	475	468	678	652	562	582	239																			
(WY)	1978	1993	1991	1991	1991	1991	1977	1968	1969	1992	1993	1992																			

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1964 - 1993

ANNUAL TOTAL	191616	327230	
ANNUAL MEAN	524	897	
HIGHEST ANNUAL MEAN			1236
LOWEST ANNUAL MEAN			2209
HIGHEST DAILY MEAN	1210	3200	1972
LOWEST DAILY MEAN	160	160	1992
ANNUAL SEVEN-DAY MINIMUM	177	211	1971
ANNUAL RUNOFF (AC-FT)	380100	649100	1971
10 PERCENT EXCEEDS	834	2310	1977
50 PERCENT EXCEEDS	495	580	
90 PERCENT EXCEEDS	232	284	

e Estimated

BEAR RIVER BASIN

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10105900 LITTLE BEAR RIVER AT PARADISE, UT

LOCATION.--LAT 41°34'32", long 111°51'16" in NW1/4, NE1/4, SE1/4, sec 29, T. 10 N., R. 1 E., Cache County, Hydrologic Unit 16010203, on left bank 1 mi west of Paradise, Utah.

DRAINAGE AREA.--

PERIOD OF RECORD.--October 1992 to September 1993.

GAGE.--Water-stage recorder. Elevation of gage is 4,740 ft above sea level, from topographic map.

REMARKS.--Records poor. Flow affected by small diversions for irrigation and flow from a fish hatchery above the station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,030 ft<sup>3</sup>/s May 7, gage height, 10.13 ft; minimum daily discharge, 4.4 ft<sup>3</sup>/s February 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	26	11	21	13	25	154	356	133	e36	7.0	13
2	8.6	31	16	20	12	24	268	370	125	34	7.3	13
3	10	28	19	21	10	22	179	408	156	37	9.5	14
4	11	25	17	23	8.8	22	190	692	117	36	17	13
5	9.9	25	13	16	8.6	20	229	519	144	36	18	14
6	12	24	10	16	8.3	18	144	618	169	29	16	15
7	14	24	9.1	13	7.9	19	113	768	216	26	17	17
8	15	25	8.6	9.2	7.5	22	104	378	214	20	18	17
9	15	25	18	8.5	6.1	24	118	266	185	20	16	17
10	16	23	23	8.9	4.4	26	119	225	172	19	13	17
11	18	23	24	12	5.3	34	105	250	185	14	13	16
12	16	22	26	14	9.4	31	104	300	183	14	13	16
13	15	21	24	14	13	29	91	345	172	12	13	16
14	15	21	20	13	13	29	82	419	165	11	12	14
15	15	20	23	15	14	45	78	437	156	9.8	12	13
16	16	20	20	18	14	76	149	463	143	12	12	11
17	16	19	19	20	14	329	159	468	145	12	12	16
18	16	18	20	20	13	587	203	434	150	11	12	19
19	16	18	19	21	15	343	175	399	157	12	12	19
20	16	20	24	21	25	378	164	389	146	12	13	18
21	17	19	20	23	24	297	211	394	129	12	13	18
22	17	20	18	24	25	228	334	378	123	13	13	17
23	17	22	20	21	24	270	369	304	119	17	14	16
24	18	19	21	21	24	391	353	264	112	23	13	18
25	17	17	19	24	24	575	299	244	105	20	11	18
26	17	17	19	21	22	386	376	251	e88	25	10	17
27	16	14	15	21	25	293	461	248	e78	21	10	18
28	16	11	18	17	25	245	405	214	e67	17	10	18
29	22	10	22	15	---	228	409	189	e60	13	11	20
30	41	10	23	15	---	200	416	168	e47	10	13	20
31	34	---	29	15	---	151	---	146	---	6.9	14	---
TOTAL	511.5	617	587.7	541.6	415.3	5367	6561	11304	4161	590.7	394.8	488
MEAN	16.5	20.6	19.0	17.5	14.8	173	219	365	139	19.1	12.7	16.3
MAX	41	31	29	24	25	587	461	768	216	37	18	20
MIN	8.6	10	8.6	8.5	4.4	18	78	146	47	6.9	7.0	11
AC-FT	1010	1220	1170	1070	824	10650	13010	22420	8250	1170	783	968

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

	1992	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993
MEAN	16.5	20.6	19.0	17.5	14.8	173	219	365	139	19.1	12.7	16.3
MAX	16.5	20.6	19.0	17.5	14.8	173	219	365	139	19.1	12.7	16.3
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993
MIN	16.5	20.6	19.0	17.5	14.8	173	219	365	139	19.1	12.7	16.3
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993

SUMMARY STATISTICS

FOR 1993 WATER YEAR

WATER YEARS 1992 - 1993

ANNUAL TOTAL	31539.6		
ANNUAL MEAN	86.4	86.4	1993
HIGHEST ANNUAL MEAN		86.4	1993
LOWEST ANNUAL MEAN		86.4	1993
HIGHEST DAILY MEAN	768	768	May 7 1993
LOWEST DAILY MEAN	4.4	4.4	Feb 10 1993
ANNUAL SEVEN-DAY MINIMUM	6.9	6.9	Feb 5 1993
ANNUAL RUNOFF (AC-FT)	62560	62600	
10 PERCENT EXCEEDS	298	297	
50 PERCENT EXCEEDS	20	20	
90 PERCENT EXCEEDS	11	11	

e Estimated

## BEAR RIVER BASIN

10108400 LOGAN, HYDE PARK &amp; SMITHFIELD CANAL AT HEAD, NEAR LOGAN, UT

LOCATION.--Lat 41°44'35", long 111°45'40", in NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, sec. 31, T. 12 N., R. 2 E., Cache County, Hydrologic Unit 16010203, Cache National Forest, on left bank 487 ft downstream from head and 3.8 mi east of Logan.

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder and 8-ft concrete Parshall flume. Datum of gage is 4,858.69 ft above sea level (Bureau of Public Roads bench mark).

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--30 years, 23.2 ft<sup>3</sup>/s, 16,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 111 ft<sup>3</sup>/s May 23, 1963, May 28, 1966; no flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	8.6	.00	.00	.00	.00	.00	.00	37	37	51	45
2	21	3.2	.00	.00	.00	.00	.00	.00	37	37	51	45
3	21	.20	.00	.00	.00	.00	.00	.00	32	37	51	45
4	21	.03	.00	.00	.00	.00	1.0	.00	19	36	52	45
5	21	.00	.00	.00	.00	.00	.00	.00	19	33	52	45
6	21	.00	.00	.00	.00	.00	.00	.00	19	35	51	39
7	21	.00	.00	.00	.00	.00	.00	.00	19	35	51	40
8	21	.00	.00	.00	.00	.00	.00	.00	18	37	50	46
9	18	.00	.00	.00	.00	.00	.00	.00	18	37	50	42
10	14	.00	.00	.00	.00	.00	.00	12	28	37	51	40
11	14	.00	.00	.00	.00	.00	.00	26	38	37	51	46
12	14	.00	.00	.00	.00	.00	.00	34	39	39	50	42
13	14	.00	.00	.00	.00	.00	.00	35	38	43	51	38
14	14	.00	.00	.00	.00	.00	.00	37	38	44	51	38
15	14	.00	.00	.00	.00	.00	.00	41	38	46	51	38
16	14	.00	.00	.00	.00	.00	.00	37	39	46	51	38
17	14	.00	.00	.00	.00	.00	.00	22	39	46	51	38
18	14	.00	.00	.00	.00	.00	.23	21	38	45	51	38
19	14	.00	.00	.00	.00	.00	.00	24	38	45	51	38
20	14	.00	.00	.00	.00	.00	.00	27	38	48	52	38
21	14	.00	.00	.00	.00	.00	.00	20	38	50	51	33
22	14	.00	.00	.00	.00	.00	.00	17	38	51	51	30
23	13	.00	.00	.00	.00	.00	.00	24	37	40	48	30
24	12	.00	.00	.00	.00	.00	.00	37	37	31	46	30
25	12	.00	.00	.00	.00	.00	.00	37	36	31	45	30
26	12	.00	.00	.00	.00	.00	.00	33	36	31	45	30
27	12	.00	.00	.00	.00	.00	.00	37	35	31	46	30
28	12	.00	.00	.00	.00	.00	.00	38	36	31	47	30
29	12	.00	.00	.00	---	.00	.00	38	37	31	46	31
30	12	.00	.00	.00	---	.00	.00	37	37	42	45	30
31	9.8	---	.00	.00	---	.00	---	37	---	50	47	---
TOTAL	475.8	12.03	0.00	0.00	0.00	0.00	1.23	671.00	996	1219	1537	1128
MEAN	15.3	.40	.000	.000	.000	.000	.041	21.6	33.2	39.3	49.6	37.6
MAX	22	8.6	.00	.00	.00	.00	1.0	41	39	51	52	46
MIN	9.8	.00	.00	.00	.00	.00	.00	.00	18	31	45	30
AC-FT	944	24	.00	.00	.00	.00	2.4	1330	1980	2420	3050	2240

CAL YR 1992 TOTAL 6634.83 MEAN 18.1 MAX 56 MIN .00 AC-FT 13160  
WTR YR 1993 TOTAL 6040.06 MEAN 16.5 MAX 52 MIN .00 AC-FT 11980

## BEAR RIVER BASIN

209

## 10109000 LOGAN RIVER ABOVE STATE DAM, NEAR LOGAN, UT

LOCATION.--Lat 41°44'36", long 111°46'55", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 36, T. 12 N., R. 1 E., Cache County, Hydrologic Unit 16010203, on left bank 0.5 mi upstream from State dam, and 2.5 mi east of Logan.

DRAINAGE AREA.--214 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1896 to current year. Published as Logan River near Logan prior to 1913. Records since May 1913 equivalent to earlier records, if records for Utah Power & Light Co.'s tailrace near Logan (station 10108000) are added. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,680 ft above sea level, from topographic map. Prior to May 7, 1913, nonrecording gage at various sites within 0.5 mi downstream at different datums. May 7, 1913, to Sept. 3, 1938, water-stage recorder at present site at different datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow affected by regulation and diversions above station for power, irrigation, and municipal culinary supply. Utah Power and Light Co. stopped diverting water from river November 1970 at which time the tailrace station (station 10108000) was discontinued. During 1963, site for gaging station for Logan, Hyde Park and Smithfield Canal (station 10108400) was relocated. Records for combined flow since that time are equivalent to previous records. For record of combined flow, see following page.

AVERAGE DISCHARGE.--River only: 80 years (water years 1914-93), 144 ft<sup>3</sup>/s, 104,300 acre-ft/yr.  
Combined river and canal: 97 years, 270 ft<sup>3</sup>/s, 195,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 2,000 ft<sup>3</sup>/s Mar. 21, 1916, gage height, 5.6 ft; minimum, 5.2 ft<sup>3</sup>/s Feb. 26, 1986, result of hydro-electric plant testing.  
Combined river and canal: Maximum discharge observed, 2,480 ft<sup>3</sup>/s May 24, 1907; minimum daily, 50 ft<sup>3</sup>/s Jan. 21, 1935.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 1,210 ft<sup>3</sup>/s May 22, gage height, 4.78 ft; minimum daily discharge, 56 ft<sup>3</sup>/s, Jan. 4.  
Combined river and canal: Maximum daily discharge, 1,180 ft<sup>3</sup>/s May 22; minimum daily, 56 ft<sup>3</sup>/s Jan. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	71	73	67	62	61	154	238	993	583	233	150
2	57	85	71	68	62	61	175	241	983	557	228	144
3	59	76	68	65	61	62	154	251	988	562	222	150
4	58	73	70	56	60	61	152	325	911	538	225	144
5	59	76	70	62	60	63	162	321	863	497	217	147
6	58	72	70	65	62	64	157	321	837	468	205	149
7	57	73	70	68	61	65	144	385	835	445	204	145
8	57	74	70	65	61	67	144	337	804	435	217	138
9	59	76	71	65	63	73	154	312	745	413	205	144
10	60	68	70	65	63	79	162	288	706	411	197	139
11	63	69	69	65	63	85	154	294	770	403	195	133
12	61	70	78	64	63	79	154	375	841	392	192	138
13	61	70	77	61	61	82	149	479	807	377	187	143
14	59	70	69	65	59	75	147	596	776	361	183	139
15	62	69	68	65	60	82	147	693	804	345	179	137
16	59	69	68	64	61	90	149	807	860	340	177	138
17	61	69	66	63	59	108	157	876	854	327	174	140
18	59	70	69	65	62	132	204	895	799	318	172	138
19	60	69	68	64	62	127	192	894	758	310	169	140
20	61	70	69	63	66	123	172	945	761	298	169	135
21	59	66	67	63	62	129	170	1090	775	290	171	137
22	60	70	67	64	63	123	181	1160	806	284	171	137
23	60	71	67	60	63	129	204	1090	794	309	168	137
24	62	67	70	61	64	142	201	1040	740	330	166	136
25	61	67	68	63	63	167	186	1040	677	308	163	133
26	62	73	67	60	58	192	207	1110	649	318	162	133
27	62	73	66	59	60	203	232	1130	641	294	160	134
28	62	73	66	60	61	203	235	1110	634	281	158	130
29	70	74	66	60	---	192	248	1090	642	273	153	131
30	80	73	69	60	---	172	258	1060	616	257	153	128
31	76	---	62	61	---	154	---	1030	---	238	153	---
TOTAL	1901	2146	2139	1956	1725	3445	5305	21823	23669	11562	5728	4167
MEAN	61.3	71.5	69.0	63.1	61.6	111	177	704	789	373	185	139
MAX	80	85	78	68	66	203	258	1160	993	583	233	150
MIN	57	66	62	56	58	61	144	238	616	238	153	128
AC-FT	3770	4260	4240	3880	3420	6830	10520	43290	46950	22930	11360	8270

CAL YR 1992 TOTAL 33995 MEAN 92.9 MAX 243 MIN 57 AC-FT 67430  
WTR YR 1993 TOTAL 85566 MEAN 234 MAX 1160 MIN 56 AC-FT 169700

## 10109001 COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF LOGAN RIVER ABOVE STATE DAM

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	80	73	67	62	61	154	238	1030	620	284	195
2	78	88	71	68	62	61	175	241	1020	594	279	189
3	80	76	68	65	61	62	154	251	1020	599	273	195
4	79	73	70	56	60	61	153	325	930	574	277	189
5	80	76	70	62	60	63	162	321	882	530	269	192
6	79	72	70	65	62	64	157	321	856	503	256	181
7	78	73	70	68	61	65	144	385	854	480	255	185
8	78	74	70	65	61	67	144	337	822	472	267	184
9	77	76	71	65	63	73	154	312	763	450	255	186
10	74	68	70	65	63	79	162	300	734	448	248	179
11	77	69	69	65	63	85	154	320	808	440	246	179
12	75	70	78	64	63	79	154	409	880	431	242	180
13	75	70	77	61	61	82	149	514	845	420	238	181
14	73	70	69	65	59	75	147	633	814	405	234	177
15	76	69	68	65	60	82	147	734	842	391	230	175
16	73	69	68	64	61	90	149	844	899	386	228	176
17	75	69	66	63	59	108	157	898	893	373	225	178
18	73	70	69	65	62	132	204	916	837	363	223	176
19	74	69	68	64	62	127	192	918	796	355	220	178
20	75	70	69	63	66	123	172	972	799	346	221	173
21	73	66	67	63	62	129	170	1110	813	340	222	170
22	74	70	67	64	63	123	181	1180	844	335	222	167
23	73	71	67	60	63	129	204	1110	831	349	216	167
24	74	67	70	61	64	142	201	1080	777	361	212	166
25	73	67	68	63	63	167	186	1080	713	339	208	163
26	74	73	67	60	58	192	207	1140	685	349	207	163
27	74	73	66	59	60	203	232	1170	676	325	206	164
28	74	73	66	60	61	203	235	1150	670	312	205	160
29	82	74	66	60	---	192	248	1130	679	304	199	162
30	92	73	69	60	---	172	258	1100	653	299	198	158
31	86	---	62	61	---	154	---	1070	---	288	200	---
TOTAL	2377	2158	2139	1956	1725	3445	5306	22509	24665	12781	7265	5295
MEAN	76.7	71.9	69.0	63.1	61.6	111	177	726	822	412	234	176
MAX	92	88	78	68	66	203	258	1180	1030	620	284	195
MIN	73	66	62	56	58	61	144	238	653	288	198	158
AC-FT	4710	4280	4240	3880	3420	6830	10520	44650	48920	25350	14410	10500
CAL YR 1992	TOTAL 40616			MEAN 111	MAX 298	MIN 62	AC-FT 80560					
WTR YR 1993	TOTAL 91621			MEAN 251	MAX 1180	MIN 56	AC-FT 181700					

## 211

e Estimated



## BEAR RIVER BASIN

10116500 CUTLER RESERVOIR NEAR COLLINSTON, UT

LOCATION.--Lat 41°50'13", long 112°02'51", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 26, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, 2 mi north of Beaver Dam, 6 mi north of Collinston.

DRAINAGE AREA (REVISED).--6,265 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1927 to current year.

GAGE.--Elevation of gage is 4,000 ft, Utah Power and Light Co. datum.

REMARKS.--New capacity table being used from Oct. 1, 1992.

COOPERATION.--Records provided by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 18,810 acre-ft Mar. 20, 21, elevation, 4,407.95 ft; minimum, 755 acre-ft Nov. 5, elevation, 4,403.20 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8377	10970	934	9754	15020	16120	11600	14310	13270	12930	15020	13620
2	8482	6461	877	10350	14670	16120	12260	15380	12930	11600	13960	13620
3	8482	4002	934	10970	15750	16120	12260	14670	12930	10650	14670	13960
4	8910	1148	877	11600	14670	15020	11930	13270	13270	10970	15020	14310
5	10050	755	850	12260	14670	15020	13960	12590	13270	10650	13270	14520
6	10650	801	801	12930	16120	15380	12260	14670	13270	10350	13620	14520
7	10970	825	905	13620	16120	15750	12930	13620	13270	10050	14670	14310
8	11280	850	997	14310	16120	15380	13270	13960	13270	9467	13270	14810
9	11600	905	965	15020	15020	16120	13270	16870	13270	9185	13620	15020
10	11930	905	965	15020	15020	16120	12930	16120	12930	8641	13960	15170
11	11930	877	965	15380	15380	16870	14310	14670	13270	8641	14310	15020
12	11930	893	997	14670	14310	16870	13960	13620	13270	8482	13270	15020
13	11600	916	934	13620	16120	16120	13270	13270	13270	8377	13620	15380
14	11600	934	965	15380	15380	16490	13620	13270	13270	8910	12590	13270
15	11600	934	934	15380	16120	16870	13620	13270	13270	9467	12590	13270
16	11600	905	934	15020	15380	16120	13620	14310	13270	10050	11930	13270
17	11600	905	905	16120	15380	17250	14310	14670	13960	10350	11600	13620
18	11600	905	965	15380	15380	17630	13960	13960	13270	10970	10970	13620
19	11600	905	1291	15380	15750	18410	13960	13960	13270	11600	10050	13270
20	11600	934	1736	16490	15020	18810	14670	12930	12930	12930	9754	13270
21	11600	952	2138	15380	15750	18810	15020	12930	12260	12930	9467	13620
22	11600	922	2744	17250	15750	17250	13270	13620	13620	13620	9467	13270
23	11600	934	2539	15750	16870	15020	15020	13620	14670	14520	10050	13270
24	11600	934	4164	16120	16120	13620	15750	13480	13620	15020	10650	13620
25	11600	905	4858	15380	15380	13270	16870	12930	13620	15020	10970	14310
26	11600	801	5231	15020	16870	12930	18020	12590	13620	14670	11600	13960
27	11600	905	5622	15750	16120	13270	15750	12930	15020	14310	11930	12930
28	11600	997	6461	16120	15750	14670	13620	12930	13960	15020	11930	13270
29	13270	905	7140	16870	---	14670	13620	12930	14670	14670	11930	13960
30	14310	1068	8119	15750	---	12930	12930	12930	12930	13960	11930	14670
31	13620	---	8641	16870	---	12260	---	12590	---	15020	12590	---
MAX	14310	10970	8641	17250	16870	18810	18020	16870	15020	15020	15020	15380
MIN	8377	755	801	9754	14310	12260	11600	12590	12260	8377	9467	12930
(#)	4407.25	4403.75	4406.45	4407.70	4407.55	4407.05	4407.15	4407.10	4407.15	4407.45	4407.10	4407.40
(*)	+5215	-12552	+7573	+8229	-1120	-3490	+670	-340	+340	+2090	-2430	+2080

CAL YR 1992 : : : : (\*) -3649  
WTR YR 1993 : : : : (\*) +6265

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.

BEAR RIVER BASIN

213

10117000 HAMMOND (EAST SIDE) CANAL NEAR COLLINSTON, UT

LOCATION.--Lat 41°49'51", long 112°03'24", in SE 1/4, sec. 27, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on right bank 3,600 ft downstream from Cutler Dam and 4 mi north of Collinston.

PERIOD OF RECORD.--June 1912 to current year. Prior to 1915, published as Hammond Ditch near Collinston. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to May 22, 1914, nonrecording gage at same site and datum.

REMARKS.--Records fair. Canal diverts from east side of Bear River at Cutler Dam for irrigation of about 58,000 acres below station in eastern Box Elder County.

COOPERATION.--Records collected by Utah Power & Light Co.

AVERAGE DISCHARGE.--79 years (water years 1913-81, 1983-93), 51.8 ft<sup>3</sup>/s, 37,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 184 ft<sup>3</sup>/s June 29, 1963, May 2, 1977; no flow at times in each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	27	.00	.00	.00	.00	.00	.00	157	162	104	138
2	12	27	.00	.00	.00	.00	.00	.00	160	162	105	138
3	12	26	.00	.00	.00	.00	.00	.00	159	160	106	132
4	12	25	.00	.00	.00	.00	.00	.00	151	159	115	125
5	12	24	.00	.00	.00	.00	.00	.00	146	162	124	125
6	13	19	.00	.00	.00	.00	.00	.00	133	166	135	126
7	14	.00	.00	.00	.00	.00	.00	.00	120	166	140	127
8	34	.00	.00	.00	.00	.00	.00	.00	118	166	138	116
9	68	.00	.00	.00	.00	.00	.00	.00	118	166	137	120
10	83	.00	.00	.00	.00	.00	.00	.00	118	166	138	124
11	85	.00	.00	.00	.00	.00	.00	.00	117	166	132	124
12	91	.00	.00	.00	.00	.00	.00	.00	120	165	127	124
13	98	.00	.00	.00	.00	.00	.00	.00	117	165	128	123
14	98	.00	.00	.00	.00	.00	.00	.00	114	165	124	125
15	93	.00	.00	.00	.00	.00	.00	.00	118	165	120	125
16	82	.00	.00	.00	.00	.00	.00	62	127	166	117	112
17	81	.00	.00	.00	.00	.00	.00	97	134	163	123	100
18	83	.00	.00	.00	.00	.00	.00	110	135	153	132	102
19	84	.00	.00	.00	.00	.00	.00	119	149	152	135	103
20	84	.00	.00	.00	.00	.00	.00	136	158	150	140	103
21	84	.00	.00	.00	.00	.00	.00	145	158	144	140	104
22	84	.00	.00	.00	.00	.00	.00	149	160	142	140	104
23	84	.00	.00	.00	.00	.00	.00	151	162	129	140	104
24	84	.00	.00	.00	.00	.00	.00	151	163	112	137	97
25	84	.00	.00	.00	.00	.00	.00	151	163	112	127	90
26	84	.00	.00	.00	.00	.00	.00	153	164	110	125	93
27	84	.00	.00	.00	.00	.00	.00	156	165	105	126	93
28	69	.00	.00	.00	.00	.00	.00	157	164	103	127	93
29	28	.00	.00	.00	---	.00	.00	161	165	103	127	94
30	28	.00	.00	.00	---	.00	.00	159	163	104	131	94
31	28	---	.00	.00	---	.00	---	158	---	104	137	---
TOTAL	1891	148.00	0.00	0.00	0.00	0.00	0.00	2215.00	4296	4513	3977	3378
MEAN	61.0	4.93	.000	.000	.000	.000	.000	71.5	143	146	128	113
MAX	98	27	.00	.00	.00	.00	.00	161	165	166	140	138
MIN	11	.00	.00	.00	.00	.00	.00	.00	114	103	104	90
AC-FT	3750	294	.00	.00	.00	.00	.00	4390	8520	8950	7890	6700

CAL YR 1992 TOTAL 22205.00 MEAN 60.7 MAX 166 MIN .00 AC-FT 44040  
WTR YR 1993 TOTAL 20418.00 MEAN 55.9 MAX 166 MIN .00 AC-FT 40500

## BEAR RIVER BASIN

10117500 WEST SIDE CANAL NEAR COLLINSTON, UT

LOCATION.--Lat 41°49'55", 112°03'36", in SW<sup>1</sup>/<sub>4</sub> sec. 27, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on left bank 4,200 ft downstream from Cutler Dam and 4 mi north of Collinston.

PERIOD OF RECORD.--June 1912 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to May 22, 1914, nonrecording gage at same site and datum.

REMARKS.--Records fair. Canal diverts from west side of Bear River at Cutler Dam for irrigation of about 58,000 acres below station in eastern Box Elder County.

COOPERATION.--Records collected by Utah Power & Light Co.

AVERAGE DISCHARGE.--79 years (water years 1913-81, 1983-92), 251 ft<sup>3</sup>/s, 181,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 787 ft<sup>3</sup>/s June 23, 1986; no flow for periods in every year except 1914.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	136	.00	.00	.00	.00	.00	.00	746	731	502	671
2	229	133	.00	.00	.00	.00	.00	.00	738	732	554	673
3	244	136	.00	.00	.00	.00	.00	.00	738	732	612	670
4	243	136	.00	.00	.00	.00	.00	.00	697	732	639	668
5	249	132	.00	.00	.00	.00	.00	.00	625	732	640	667
6	295	132	.00	.00	.00	.00	.00	.00	564	733	637	664
7	329	133	.00	.00	.00	.00	.00	.00	499	731	616	663
8	347	134	.00	.00	.00	.00	.00	.00	457	730	581	662
9	351	135	.00	.00	.00	.00	.00	.00	474	729	583	661
10	352	136	.00	.00	.00	.00	.00	.00	484	727	584	660
11	351	137	.00	.00	.00	.00	.00	.00	515	727	582	654
12	347	138	.00	.00	.00	.00	.00	.00	545	725	582	653
13	345	139	.00	.00	.00	.00	.00	.00	544	733	579	655
14	347	140	.00	.00	.00	.00	.00	.00	587	712	578	655
15	352	140	.00	.00	.00	.00	.00	.00	612	683	576	653
16	353	120	.00	.00	.00	.00	.00	.00	650	686	579	622
17	354	102	.00	.00	.00	.00	.00	.00	682	684	584	569
18	355	102	.00	.00	.00	.00	.00	419	701	684	614	546
19	356	93	.00	.00	.00	.00	.00	462	713	663	616	548
20	356	81	.00	.00	.00	.00	.00	606	712	637	622	532
21	357	77	.00	.00	.00	.00	.00	680	720	642	620	494
22	358	77	.00	.00	.00	.00	.00	698	722	625	620	484
23	360	78	.00	.00	.00	.00	.00	694	722	579	620	460
24	360	54	.00	.00	.00	.00	.00	693	726	544	614	439
25	360	.00	.00	.00	.00	.00	.00	707	725	535	616	442
26	362	.00	.00	.00	.00	.00	.00	729	718	486	619	443
27	365	.00	.00	.00	.00	.00	.00	749	717	442	620	443
28	278	.00	.00	.00	.00	.00	.00	756	722	442	612	445
29	141	.00	.00	.00	.00	.00	.00	759	731	440	616	443
30	140	.00	.00	.00	.00	.00	.00	757	732	440	651	445
31	139	.00	.00	.00	.00	.00	.00	753	.00	464	670	.00
TOTAL	9609	2821.00	0.00	0.00	0.00	0.00	0.00	9462.00	19518	19882	18738	17284
MEAN	310	94.0	.000	.000	.000	.000	.000	305	651	641	604	576
MAX	365	140	.00	.00	.00	.00	.00	759	746	733	670	673
MIN	139	.00	.00	.00	.00	.00	.00	.00	457	440	502	439
AC-FT	19060	5600	.00	.00	.00	.00	.00	18770	38710	39440	37170	34280

CAL YR 1992 TOTAL 93965.00 MEAN 257 MAX 747 MIN .00 AC-FT 186400  
WTR YR 1993 TOTAL 97314.00 MEAN 267 MAX 759 MIN .00 AC-FT 193000

## BEAR RIVER BASIN

215

10118000 BEAR RIVER NEAR COLLINSTON, UT

LOCATION.--Lat 41°50'03", long 112°03'16", in NW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, sec. 27, T. 13 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on right bank 800 ft downstream from Cutler plant of Utah Power & Light Co., 2,000 ft downstream from Cutler Dam, and 5.5 mi north of Collinston.

DRAINAGE AREA.--6,267 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1889 to current year. Published as "at Collinston" prior to 1900. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,276.13 ft above sea level (levels by Bureau of Reclamation). Prior to Nov. 8, 1913, nonrecording gage, and Nov. 8, 1913 to Sept. 10, 1938, water-stage recorder, at site 0.8 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by storage reservoir, power developments and diversions for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft<sup>3</sup>/s Feb. 20, 1986, gage height, 8.68 ft; minimum daily, 10 ft<sup>3</sup>/s Aug. 4-12, 18-23, 1905; practically no flow at 2400 Aug. 5, 1920.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,360 ft<sup>3</sup>/s May 20; minimum daily, 22 ft<sup>3</sup>/s, several days in October.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	1600	911	481	882	610	3050	2530	2970	125	206	27
2	24	1520	837	480	523	1100	3130	2210	2840	328	592	27
3	24	1640	790	481	733	585	2610	2730	2800	159	31	27
4	23	1560	786	481	959	1020	2360	2690	2850	30	638	27
5	23	772	567	476	760	749	2230	3130	3030	74	94	27
6	23	524	611	471	428	773	2710	2940	3040	77	33	27
7	22	521	636	469	778	854	2750	3450	3130	32	770	27
8	22	525	651	469	427	821	2560	3660	3200	30	32	27
9	23	526	755	490	1270	778	2290	3880	3240	29	186	27
10	23	527	823	597	542	948	2330	4240	3170	30	196	28
11	23	513	880	957	863	1230	2000	4290	3120	29	121	27
12	23	490	869	946	1040	1330	2540	4150	2900	29	509	27
13	23	492	812	588	655	1430	2200	3960	2980	27	100	860
14	23	499	755	665	834	1100	2330	3900	3070	28	655	160
15	22	500	722	189	616	1490	1940	3900	3090	28	192	28
16	22	500	695	1210	1000	1800	1290	3990	2880	28	112	28
17	22	500	608	534	753	2470	1790	4350	2510	28	60	28
18	22	500	535	666	676	3350	2080	4290	1960	28	28	930
19	22	504	506	600	878	3790	1860	4330	1940	28	28	226
20	22	537	510	492	622	3890	2790	4360	1670	28	27	616
21	22	592	464	1210	882	3890	1640	4040	1310	27	27	28
22	22	601	467	172	1020	3880	2030	4110	691	27	26	504
23	22	609	493	1380	797	3780	1650	4170	522	332	26	613
24	22	572	520	858	891	3290	1940	4170	1450	1130	27	162
25	22	535	525	763	869	3050	1790	4150	681	743	27	252
26	22	409	530	821	754	3020	1970	3860	1020	1520	27	684
27	22	394	502	619	1040	3020	2930	3640	388	1540	27	359
28	26	525	482	731	553	3170	2600	3550	399	1050	27	152
29	69	634	479	560	---	3590	2500	3470	393	1460	27	250
30	671	733	474	725	---	3730	2180	3320	688	418	27	404
31	1120	---	479	703	---	3580	---	3150	---	942	27	---
TOTAL	2495	20354	19674	20284	22045	68118	68070	114610	63932	10384	4905	6609
MEAN	80.5	678	635	654	787	2197	2269	3697	2131	335	158	220
MAX	1120	1640	911	1380	1270	3890	3130	4360	3240	1540	770	930
MIN	22	394	464	172	427	585	1290	2210	388	27	26	27
AC-FT	4950	40370	39020	40230	43730	135100	135000	227300	126800	20600	9730	13110

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1993, BY WATER YEAR (WY)

	1140	1383	1408	1454	1654	2102	2823	2804	2005	597	448	708
MEAN	1140	1383	1408	1454	1654	2102	2823	2804	2005	597	448	708
MAX	4061	4270	4036	3315	5437	5955	7273	7971	9225	4739	2795	3233
(WY)	1984	1984	1984	1984	1986	1910	1907	1922	1909	1907	1983	1984
MIN	80.5	420	312	589	729	792	485	25.0	22.5	15.1	14.0	13.9
(WY)	1993	1903	1903	1935	1989	1934	1934	1992	1960	1977	1981	1979

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1903 - 1993

ANNUAL TOTAL	153618	421480	1541	1984
ANNUAL MEAN	420	1155	4379	1934
HIGHEST ANNUAL MEAN			442	1934
LOWEST ANNUAL MEAN			12000	1986
HIGHEST DAILY MEAN	1940	Feb 23	4360	May 20
LOWEST DAILY MEAN	21	Sep 26	22	Oct 7
ANNUAL SEVEN-DAY MINIMUM	22	Oct 15	22	Oct 15
ANNUAL RUNOFF (AC-FT)	304700	836000	1116000	7.5
10 PERCENT EXCEEDS	1100	3180	3280	7.2
50 PERCENT EXCEEDS	31	651	1260	26
90 PERCENT EXCEEDS	23	27	26	

## BEAR RIVER BASIN

10118000 BEAR RIVER NEAR COLLINSTON, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 1,920 mg/L, Oct. 31, 1990; minimum daily mean, 9 mg/L, Feb. 6-8, 11, 1993.

SEDIMENT LOADS: Maximum daily, 3,200 tons, Oct. 31, 1990; minimum daily, 1.1 tons, Sept. 29, 1992.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 124 mg/L, May 20; minimum daily mean, 9 mg/L, Feb. 6-8, 11.

SEDIMENT LOADS: Maximum daily, 1,460 tons, May 20; minimum daily, 1.4 tons, Oct. 4, 16, 22, July 11, 13.

## SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	e23	e1.5	38	164	e69	e169	e23	e29	e13	e31	e23	e38
2	24	1.5	46	187	e62	e140	e20	e26	e13	e18	e26	e79
3	37	2.4	43	189	e52	e110	e22	e28	e12	e25	e22	e34
4	22	1.4	26	108	e45	e96	e22	e29	e13	e33	e17	e48
5	30	1.9	33	58	e25	e38	e20	e25	e11	e25	e16	e34
6	34	2.1	15	21	e27	e45	e18	e23	e9	e12	e15	e32
7	34	2.0	36	50	e27	e46	e14	e18	e9	e20	e18	e44
8	33	2.0	49	69	e25	e45	e14	e18	e9	e11	e17	e39
9	37	2.3	66	93	e33	e69	e26	e35	e12	e41	e15	e31
10	36	2.3	47	66	e28	e62	e44	e70	e11	e15	e15	e38
11	38	2.4	36	50	e30	e71	e44	e113	e9	e23	e16	e53
12	40	2.5	17	23	e27	e63	e35	e93	e11	e31	e19	e68
13	30	1.9	23	31	e27	e59	e30	e50	e13	e24	e20	e77
14	42	2.6	29	39	e24	e50	e29	e54	e11	e26	e21	e62
15	33	2.0	35	48	e21	e42	e27	e14	e11	e19	e21	e83
16	23	1.4	38	52	e24	e45	e30	e99	e12	e34	e21	e100
17	27	1.6	23	31	e25	e40	e26	e37	e10	e21	e26	e174
18	29	1.8	43	58	e18	e26	e28	e49	e10	e20	e31	e279
19	29	1.8	e37	e50	e21	e28	e28	e44	e10	e26	e35	e360
20	34	2.1	e59	e85	e21	e29	e29	e40	e10	e17	e39	e405
21	29	1.8	e49	e79	e13	e16	e27	e87	e12	e28	e40	e421
22	23	1.4	e48	e78	e14	e18	e25	e12	e11	e30	e42	e436
23	32	2.0	e67	e111	e23	e30	e19	e72	e11	e24	e42	e432
24	33	2.0	e45	e69	e30	e42	e13	e30	e12	e29	e40	e354
25	34	2.1	e25	e37	e29	e41	e14	e29	e12	e28	e39	e325
26	38	2.2	e13	e15	e32	e45	e13	e28	e11	e22	e38	e314
27	33	1.9	e12	e12	e29	e40	e14	e24	e17	e50	e40	e323
28	26	1.8	e33	e48	e28	e36	e12	e24	e19	e27	e41	e355
29	42	7.1	e26	e45	e25	e32	e11	e18	---	---	e59	e583
30	44	92	e55	e109	e15	e20	e15	e27	---	---	e82	e824
31	46	137	---	---	e18	e24	e15	e29	---	---	e73	e703
TOTAL	---	290.8	---	2075	---	1617	---	1274	---	710	---	7148

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	e63	e522	58	496	92	734	48	21	33	13	67	4.9
2	e89	e753	75	642	84	641	33	32	43	67	58	4.2
3	e83	e592	67	575	78	592	28	14	35	3.0	54	3.9
4	e80	e512	68	548	64	492	23	1.9	42	83	58	4.2
5	e73	e446	72	531	72	591	27	5.5	41	10	51	3.8
6	e79	e589	63	437	72	590	27	5.7	43	3.7	51	3.7
7	e75	e568	58	545	60	503	28	2.4	37	81	50	3.7
8	e73	e511	81	797	53	458	21	1.7	e35	e3.0	31	2.3
9	e61	e377	84	879	61	531	20	1.6	e53	e28	29	2.1
10	e61	e389	74	845	76	651	20	1.6	e47	e25	39	2.9
11	e58	e317	64	737	79	663	18	1.4	e44	e16	34	2.5
12	e66	e461	55	618	67	526	21	1.6	e51	e73	38	2.8
13	e66	e397	57	605	66	531	19	1.4	e44	e13	61	156
14	e68	e427	67	712	e75	e620	28	2.1	e61	e105	56	31
15	e63	e361	84	882	e89	e746	40	3.0	e60	e33	36	2.8
16	e63	e235	80	867	e84	e651	42	3.2	62	20	37	2.8
17	e84	e435	100	1180	74	508	39	2.9	50	8.3	52	3.8
18	e83	e465	121	1400	63	349	45	3.4	48	3.7	67	168
19	e89	e464	113	1330	69	361	43	3.2	40	3.1	59	37
20	e106	e804	124	1460	61	276	41	3.1	43	3.1	61	100
21	e97	e428	110	1200	64	228	41	3.0	42	3.1	65	4.9
22	e100	e570	117	1300	50	86	53	3.9	54	3.9	53	60
23	e89	e542	114	1280	52	74	56	51	48	3.4	67	106
24	e95	e771	117	1320	58	226	60	185	44	3.2	63	24
25	e87	e708	116	1300	41	69	61	137	49	3.7	53	43
26	e76	e626	116	1210	53	148	71	291	55	4.0	56	108
27	e80	e662	109	1080	52	59	59	245	58	4.3	57	56
28	e96	e800	106	1020	42	48	63	162	61	4.5	54	22
29	70	584	101	947	46	48	67	262	55	4.0	43	30
30	56	473	100	900	38	64	62	73	59	4.3	37	40
31	---	---	102	872	---	---	49	120	59	4.3	---	---
TOTAL	---	15789	---	28515	---	12064	---	1645.6	---	637.6	---	1036.3

YEAR 72802.3

e Estimated

BEAR RIVER BASIN

217

10126000 BEAR RIVER NEAR CORINNE, UT

LOCATION.--Lat 41°34'35", long 112°06'00", in NE1/4,SE1/4,NE1/4 sec. 30, T. 10 N., R. 2 W., Box Elder County, Hydrologic Unit 16010204, on right bank 1.2 mi downstream from Salt Creek, 2.0 mi northeast of Corinne, and 2.8 mi downstream from Malad River.

DRAINAGE AREA.--7,029 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1949 to September 1957, October 1963 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,204.6 ft above sea level, unadjusted. Auxiliary nonrecording gage 7,800 ft downstream July 27, 1950 to Nov. 21, 1955.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,770 ft<sup>3</sup>/s May 19, 1984, gage height, 17.50 ft; minimum daily discharge, 47 ft<sup>3</sup>/s Aug. 25, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,620 ft<sup>3</sup>/s May 21; minimum daily discharge, 55 ft<sup>3</sup>/s Oct. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	854	714	e500	e700	e660	3700	2350	3310	749	780	155
2	57	1400	879	e500	e760	e700	3210	2400	3120	358	562	147
3	55	1410	870	e500	e600	e860	3070	2420	3090	392	632	144
4	56	1490	852	e500	e720	e680	2640	2560	3100	314	236	132
5	59	1470	e800	e500	e860	e790	2320	2920	3190	238	434	132
6	59	960	e540	e500	e680	e720	2420	3060	3440	234	344	131
7	62	622	e560	e500	e580	e740	2660	3240	3510	223	204	128
8	63	524	e580	e500	e680	e780	2760	3770	3560	207	513	129
9	65	526	e600	e500	e580	e760	2410	3950	3560	183	391	126
10	67	548	e700	e520	e870	e770	2380	4240	3510	166	231	132
11	70	559	e760	e600	e640	924	2060	4550	3430	175	302	135
12	70	550	e820	e930	e740	1140	1980	4570	3390	173	276	134
13	73	519	e800	e890	e840	1280	2340	4430	3180	160	523	135
14	78	506	e760	e560	e660	1240	2210	4230	3240	160	289	511
15	84	507	e740	e620	e760	1250	2180	4140	3250	148	515	510
16	92	510	e700	e300	e640	1560	1810	4120	3200	138	341	277
17	96	503	e680	e900	e820	1950	1500	4260	2980	141	242	204
18	97	493	e600	e580	e700	3020	1760	4550	2770	137	193	193
19	99	488	e540	e680	e660	3740	1830	4590	2340	147	175	690
20	102	492	e520	e640	e770	4190	2010	4610	2030	137	161	603
21	105	495	e520	e500	e660	4330	2250	4620	1920	123	172	742
22	112	534	e480	e900	e740	4370	1860	4340	1600	127	179	488
23	115	569	e480	e320	e840	4380	1780	4360	1110	144	198	586
24	117	559	e520	e940	e720	4240	1840	4430	986	317	186	711
25	119	485	e560	e760	e760	3710	1760	4440	1500	1060	167	515
26	120	476	e570	e660	e750	3420	1840	4380	1130	1110	168	471
27	122	459	e570	e700	e680	3310	2380	4100	1250	1600	167	722
28	126	449	e540	e640	e840	3270	2770	3860	787	1620	160	669
29	129	476	e520	e720	---	3440	2580	3750	635	1370	165	476
30	130	561	e520	e640	---	3830	2370	3640	466	1550	156	404
31	301	---	e520	e720	---	3880	---	3490	---	841	161	---
TOTAL	2965	19994	19815	19220	20250	69934	68680	120370	74584	14442	9223	10532
MEAN	95.6	666	639	620	723	2256	2289	3883	2486	466	298	351
MAX	301	1490	879	940	870	4380	3700	4620	3560	1620	780	742
MIN	55	449	480	300	580	660	1500	2350	466	123	156	126
AC-FT	5880	39660	39300	38120	40170	138700	136200	238800	147900	28650	18290	20890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950-57, 1964-93, BY WATER YEAR (WY)

MEAN	1447	1725	1776	1864	1925	2401	2976	3038	2256	792	689	999
MAX	4240	4471	4414	3639	5966	6041	7258	9598	9201	4186	3045	3423
(WY)	1984	1985	1984	1984	1986	1986	1985	1984	1984	1983	1983	1984
MIN	95.6	647	639	620	723	913	638	71.8	77.6	80.9	55.2	62.2
(WY)	1993	1989	1993	1993	1993	1991	1992	1992	1992	1992	1992	1992

SUMMARY STATISTICS FOR 1992 CALENDAR YEAR FOR 1993 WATER YEAR WATER YEARS 1950-57, 1964-93

ANNUAL TOTAL	147303	450009	
ANNUAL MEAN	402	1233	1821
HIGHEST ANNUAL MEAN			5050
LOWEST ANNUAL MEAN			435
HIGHEST DAILY MEAN	1490	Nov 4	4620
LOWEST DAILY MEAN	47	Aug 25	55
ANNUAL SEVEN-DAY MINIMUM	50	Aug 22	59
ANNUAL RUNOFF (AC-FT)	292200	892600	1319000
10 PERCENT EXCEEDS	913	3510	3730
50 PERCENT EXCEEDS	121	660	1500
90 PERCENT EXCEEDS	59	132	138

e Estimated



## BEAR RIVER BASIN

10126000 BEAR RIVER NEAR CORINNE, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1976 to September 1981.

WATER TEMPERATURES: October 1974 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 6,140 microsiemens July 5, 1979; minimum daily, 440 microsiemens May 25, 1978.

WATER TEMPERATURES: Maximum, 30.0°C July 27, 28, 1978; minimum, 0.0°C on many days during winter period each year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BAROMETRIC PRES-SURE (MM OF HG)	COLIFORM, FECA, UM-MF (COLS./100 ML)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CaCO3)
NOV, 1992												
13...	1300	521	1540	8.4	10.0	4.0	8.5	10.4	662	K10	450	320
MAR, 1993												
24...	1215	4160	980	8.2	17.0	8.5	65	8.2	650	110	300	280
MAY												
26...	1315	4380	540	8.3	28.0	19.5	42	6.4	651	36	56	200
SEP												
03...	1000	160	3240	8.5	17.5	18.0	55	9.0	660	800	480	380

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)
NOV, 1992												
13...	63	40	190	55	5	17	8	349	299	68	280	0.30
MAR, 1993												
24...	58	32	83	38	2	14	0	299	245	71	120	0.20
MAY												
26...	50	17	31	25	1	4.2	0	222	182	20	46	0.20
SEP												
03...	73	47	520	74	12	14	7	320	274	80	770	0.60

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
NOV, 1992												
13...	12	858	856	1.17	1210	1.05	1.05	0.050	0.050	1.10	1.10	0.150
MAR, 1993												
24...	17	568	556	0.77	6380	2.54	2.54	--	0.060	--	2.60	--
MAY												
26...	7.7	291	287	0.40	3440	0.180	0.180	--	0.020	--	0.200	--
SEP												
03...	14	3510	1690	4.77	1520	0.720	0.720	--	0.080	--	0.800	--

DATE	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
NOV, 1992											
13...	0.140	0.18	0.45	0.60	1.7	7.5	0.220	0.170	0.160	0.150	0.46
MAR, 1993											
24...	0.370	0.48	0.83	1.2	3.8	--	0.350	0.250	--	0.250	0.77
MAY											
26...	0.030	0.04	0.57	0.60	0.80	--	0.210	0.040	--	0.040	0.12
SEP											
03...	0.030	0.04	0.47	0.50	1.3	--	0.100	0.030	--	<0.010	--

K Results based on colony counts outside acceptable range (non-ideal colony count).

BEAR RIVER BASIN

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10126000 BEAR RIVER NEAR CORINNE, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV , 1992							
13...	1300	10	93	<3	7	120	5
MAR , 1993							
24...	1215	30	78	<3	26	76	5
MAY							
26...	1315	<10	54	<3	10	23	1
SEP							
03...	1000	<10	120	<9	51	270	10

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV , 1992						
13...	<10	<1	<1	<1.0	630	<6
MAR , 1993						
24...	10	1	<1	<1.0	400	<6
MAY						
26...	<10	<1	<1	<1.0	200	<6
SEP						
03...	<30	1	<1	<1.0	1100	<18

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV , 1992						
13...	1300	521	4.0	--	59	83
MAR , 1993						
24...	1215	4160	8.5	93	177	1990
MAY						
26...	1315	4380	19.5	--	129	1530
SEP						
03...	1000	160	18.0	--	162	70

## WEBER RIVER BASIN

10128500 WEBER RIVER NEAR OAKLEY, UT

LOCATION.--Lat 40°44'14", long 111°14'50", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 15, T. 1 S., R. 6 E., Summit County, Hydrologic Unit 16020101, on right bank 1.5 mi downstream from South Fork, 2.2 mi upstream from Weber-Provo diversion canal, and 3.2 mi northeast of Oakley. Prior to July 21, 1993, at site 0.30 mi upstream.

DRAINAGE AREA.--162 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1904 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 790: 1934. WSP 1394: 1907-09, 1911-12, 1921-22. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,600 ft above sea level, from topographic map. Prior to Oct. 25, 1933, staff gage at site 0.2 mi downstream at different datum. Oct. 25, 1933 to Aug. 29, 1955, water-stage recorder at present site at datum 0.5 ft higher. Aug. 29, 1955 to Oct. 27, 1981 at present site at different datum. Oct. 27, 1981 to July 21, 1993 at site 0.3 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Several small diversions for irrigation above station. Flow slightly regulated by several small lakes on headwaters and a small reservoir on Smith and Morehouse Creek. Total capacity of lakes and reservoir, 3,400 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,170 ft<sup>3</sup>/s June 13, 1921, gage height, 9.0 ft, site and datum then in use, from rating curve extended above 2,000 ft<sup>3</sup>/s; minimum observed, 15 ft<sup>3</sup>/s Dec. 9, 1977, minimum discharge, 15 ft<sup>3</sup>/s Dec. 15, 1990, Feb. 27, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 26	0230	*2,100	*8.04	June 16	0400	1,940	7.86

Minimum discharge, 20 ft<sup>3</sup>/s Nov. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	42	42	42	43	42	102	269	1590	1040	215	121
2	32	45	41	41	43	42	115	274	1560	1020	203	133
3	32	41	36	37	38	39	99	301	1380	1050	191	135
4	32	39	37	e37	38	40	102	381	1120	877	188	131
5	32	42	39	e38	40	49	112	332	989	723	187	129
6	33	40	37	e39	43	47	102	320	931	621	184	128
7	32	40	35	e40	44	50	94	322	843	588	172	133
8	32	42	40	e40	40	52	103	294	771	572	187	133
9	32	38	38	e40	43	51	115	286	689	545	187	132
10	32	32	40	39	42	50	120	310	666	523	177	130
11	32	35	40	40	42	49	118	354	782	513	175	128
12	32	41	39	36	41	46	116	416	1040	487	161	126
13	32	41	34	39	39	46	112	542	1180	462	146	127
14	32	38	41	43	38	47	116	764	1280	425	133	126
15	32	38	40	42	e36	49	120	844	1700	396	126	125
16	32	38	37	40	38	47	121	1120	1780	368	123	122
17	32	38	37	39	41	53	127	1050	1660	338	132	126
18	32	38	40	41	44	59	158	1120	1340	317	128	114
19	32	38	36	40	46	55	138	1200	1300	301	127	110
20	32	39	36	39	43	57	136	1310	1530	e271	129	107
21	32	35	41	41	36	60	151	1430	1620	e245	142	104
22	34	37	40	40	39	59	183	1700	1660	253	128	102
23	33	37	39	31	41	64	220	1380	1500	363	126	98
24	33	30	34	37	42	74	205	1540	1210	527	123	100
25	34	29	35	38	42	88	192	1730	1110	357	124	89
26	35	34	37	38	e41	102	222	1660	1200	398	129	74
27	35	38	39	37	43	110	249	1810	1280	359	121	66
28	39	42	42	38	43	117	266	1550	1310	299	123	64
29	39	37	39	40	---	107	280	1400	1270	263	122	62
30	46	35	35	38	---	97	283	e1400	1150	247	122	60
31	46	---	35	41	---	89	---	e1440	---	231	121	---
TOTAL	1047	1139	1181	1211	1149	1937	4577	28849	37441	14979	4652	3335
MEAN	33.8	38.0	38.1	39.1	41.0	62.5	153	931	1248	483	150	111
MAX	46	45	42	43	46	117	283	1810	1780	1050	215	135
MIN	32	29	34	31	36	39	94	269	666	231	121	60
AC-FT	2080	2260	2340	2400	2280	3840	9080	57220	74260	29710	9230	6610

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1993, BY WATER YEAR (WY)

	MEAN	79.1	70.1	60.8	56.4	56.4	66.4	179	687	916	264	113	84.0
MAX	202	122	105	91.2	86.1	181	515	1279	2178	1486	259	199	199
(WY)	1983	1913	1984	1984	1915	1986	1910	1914	1909	1907	1983	1983	1983
MIN	33.8	37.6	28.8	37.4	35.0	35.9	64.2	170	81.0	41.7	34.4	32.9	32.9
(WY)	1993	1978	1978	1977	1964	1977	1975	1977	1934	1934	1934	1934	1934

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1905 - 1993

ANNUAL TOTAL	35783	101497	
ANNUAL MEAN	97.8	278	220
HIGHEST ANNUAL MEAN			415
LOWEST ANNUAL MEAN			77.4
HIGHEST DAILY MEAN	586	May 20	1810
LOWEST DAILY MEAN	29	Nov 25	29
ANNUAL SEVEN-DAY MINIMUM	32	Oct 7	32
ANNUAL RUNOFF (AC-FT)	70980	201300	159100
10 PERCENT EXCEEDS	240	1110	623
50 PERCENT EXCEEDS	44	89	79
90 PERCENT EXCEEDS	33	35	48

e Estimated

## WEBER RIVER BASIN

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## 10129400 ROCKPORT RESERVOIR NEAR WANSHIP, UT

LOCATION.--Lat 40°47'25", long 111°24'12", in NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, sec. 29, T. 1 N., R. 5 E., Summit County, Hydrologic Unit 16020101, in powerhouse on downstream side of dam on Weber River, 1.2 mi south of Wanship and 1.2 mi upstream from Silver Creek.

DRAINAGE AREA.--334 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1957 to current year. Month-end contents only prior to October 1960, published in WSP 1734.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Bureau of Reclamation).

REMARKS.--No estimated daily contents. Records good. Reservoir is formed by earthfill rock-faced dam; storage began in fall of 1956; dam completed March 1957. Usable capacity, 60,860 acre-ft between elevation 5,930 ft (bottom of outlet tunnel) and 6,037 ft (top of spillway) above mean sea level. Dead storage, 1,260 acre-ft. Figures given herein represent usable contents. Water is used for irrigation, domestic, and industrial purposes.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 65,030 acre-ft June 24, 27, 28, 1967 and June 12, 13, 1983, elevation, 6,040.8 ft; minimum observed since storage began, 152 acre-ft Sept. 10, 15, 1959, elevation, 5,931.2 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 62,130 acre-ft June 28, elevation, 6,038.3 ft; minimum contents, 14,000 acre-ft Oct. 1, elevation, 5,976.2 ft.

## Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,975	13,360	5,995	24,730	6,015	39,750
5,980	15,900	6,000	28,150	6,020	44,110
5,985	18,640	6,005	31,800	6,025	48,720
5,990	21,570	6,010	35,660		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14000	15630	18900	22900	27320	31200	39170	40620	50950	61770	60790	56090
2	14020	15800	19040	23060	27460	31330	39590	40610	51960	61600	60700	55830
3	14050	16020	19180	23190	27590	31410	39940	40630	53370	61640	60630	55580
4	14090	16140	19290	23310	27700	31360	40070	40880	53960	61610	60560	55330
5	14120	16250	19380	23410	27810	31290	40390	41270	54080	61530	60520	54970
6	14150	16380	19500	23550	27930	31220	40720	41570	54040	61390	60430	54700
7	14180	16500	19620	23730	28080	31140	40680	41860	53850	61280	60340	54470
8	14220	16640	19760	23890	28220	31090	40620	41940	53870	61230	60260	54250
9	14250	16770	19910	24060	28360	31030	40610	41510	53870	61200	60190	54020
10	14270	16870	20050	24220	28510	30980	40630	41000	54130	61150	60100	53790
11	14310	16950	20200	24380	28650	30930	40630	40600	54410	61100	60060	53580
12	14350	17050	20400	24510	28790	30900	40600	40540	54800	61030	59940	53340
13	14390	17150	20540	24630	28920	30860	40580	40530	55590	60950	59810	53130
14	14420	17260	20640	24790	29030	30830	40540	40570	56620	60900	59760	52970
15	14450	17360	20780	24960	29130	30780	40540	40720	58040	60840	59590	52870
16	14490	17460	20900	25130	29230	30760	40570	41110	59080	60750	59380	52660
17	14520	17550	21000	25290	29350	30820	40600	41460	60040	60680	59190	52540
18	14550	17650	21100	25440	29490	31060	40630	41800	60790	60590	58980	52470
19	14590	17750	21230	25600	29640	31370	40680	42410	60440	60520	58780	52390
20	14640	17850	21340	25750	29820	31680	40660	43310	60140	60410	58560	52270
21	14680	17930	21480	25900	29990	32070	40630	44360	60540	60310	58410	52130
22	14720	18040	21620	26050	30150	32450	40620	45980	61000	60240	58240	52000
23	14780	18150	21770	26190	30320	32830	40600	47180	61390	60250	58050	51880
24	14830	18240	21900	26320	30490	33320	40610	47680	61620	60830	57850	51750
25	14890	18310	22010	26450	30670	34010	40610	47890	61730	61120	57620	51600
26	14970	18380	22120	26570	30800	34970	40620	48240	61860	61240	57430	51480
27	15030	18450	22250	26700	30920	35960	40600	48860	62010	61400	57220	51320
28	15100	18560	22380	26820	31060	36810	40600	49270	62130	61310	57000	51140
29	15170	18680	22520	26940	---	37740	40590	49380	62080	61170	56770	50950
30	15280	18780	22650	27060	---	38490	40600	49580	61990	61050	56540	50770
31	15470	---	22750	27180	---	38880	---	50240	---	60890	56340	---
MAX	15470	18780	22750	27180	31060	38880	40720	50240	62130	61770	60790	56090
MIN	14000	15630	18900	22900	27320	30760	39170	40530	50950	60240	60340	50770
(#)	5979.2	5985.2	5991.9	5998.6	6004.0	6014.0	6016.0	6026.6	6038.0	6037.0	6032.7	6027.1
(*)	+1340	+3310	+3970	+4430	+3880	+7820	+1720	+9640	+11750	-1100	-4550	-5570

CAL YR 1992 . . . . . (\*) -4550  
WTR YR 1993 . . . . . (\*) +36640

(#) Elevation in feet, at end of month.  
(\*) Change in contents, in acre-feet.

## WEBER RIVER BASIN

10129500 WEBER RIVER NEAR WANSHIP, UT

LOCATION.--Lat 40°47'34", Long 111°24'15", in SE¼,SE¼,NE¼, sec. 29, T. 1 N., R. 5 E., Summit County, Hydrologic Unit 16020101, on left bank 0.1 mi downstream from Wanship Dam, 1.2 mi south of Wanship and 1.25 mi upstream from Silver Creek.

DRAINAGE AREA.--335 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to September 1955, April 1957 to September 1960, October 1988 to current year. Monthly discharges only April 1957 to September 1960, published in WSP 1734.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,900 ft above sea level, from topographic map. Nov. 17, 1950, to Sept. 30, 1955, water-stage recorder at site 200 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow completely regulated by Wanship Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft<sup>3</sup>/s May 30, 1951, gage height, 4.73 ft, site and datum then in use; minimum daily, 0.1 ft<sup>3</sup>/s Nov. 17-22, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge 1,260 ft<sup>3</sup>/s on May 28, minimum daily discharge 22 ft<sup>3</sup>/s, Oct. 2, Nov. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	23	e23	e23	e23	e23	155	205	551	496	273	246
2	22	23	e23	e23	e23	e50	158	204	452	428	249	244
3	23	23	e23	e23	e23	e90	156	202	606	461	248	243
4	23	23	e23	e23	e23	e139	157	208	709	450	249	225
5	23	23	e23	e23	e23	e139	74	219	711	410	243	212
6	23	23	e23	e23	e23	e139	129	333	714	363	236	244
7	23	22	e23	e23	e23	e139	190	393	613	325	223	240
8	23	23	e23	e23	e23	e139	182	465	506	311	237	236
9	23	23	e23	e23	e23	e139	178	521	313	303	235	234
10	23	23	e23	e23	e23	e139	183	503	205	266	238	240
11	23	23	e23	e23	e23	e139	183	346	205	266	237	229
12	23	23	e23	e23	e23	e139	176	272	207	263	243	227
13	23	23	e23	e23	e23	e139	174	296	204	247	257	229
14	23	23	e23	e23	e23	e139	165	293	201	237	251	225
15	23	23	e23	e23	e23	e139	158	333	447	230	220	225
16	23	23	e23	e23	e23	e139	158	329	786	219	228	225
17	23	23	e23	e23	e23	e139	165	331	812	204	240	222
18	23	24	e23	e23	e23	139	183	332	986	197	274	217
19	23	24	e23	e23	e23	139	189	335	1010	195	261	215
20	23	25	e23	e23	e23	139	191	334	828	192	223	215
21	23	25	e23	e23	e23	139	187	333	736	193	195	217
22	24	23	e23	e23	e23	139	188	559	777	208	206	217
23	24	e23	e23	e23	e23	139	190	698	746	249	209	216
24	24	e23	e23	e23	e23	140	192	910	594	293	222	221
25	24	e23	e23	e23	e23	140	191	1080	465	348	229	220
26	24	e23	e23	e23	e23	139	193	1110	463	389	209	221
27	23	e23	e23	e23	e23	144	194	1200	523	448	201	224
28	24	e23	e23	e23	e23	129	202	1260	589	407	185	226
29	24	e23	e23	e23	---	35	201	1090	606	335	158	227
30	23	e23	e23	e23	---	108	201	753	574	328	182	225
31	23	---	e23	e23	---	156	---	625	---	294	220	---
TOTAL	721	695	713	713	644	3934	5243	16072	17139	9555	7081	6807
MEAN	23.3	23.2	23.0	23.0	23.0	127	175	518	571	308	228	227
MAX	25	25	23	23	23	156	202	1260	1010	496	274	246
MIN	22	22	23	23	23	23	74	202	201	192	158	212
AC-FT	1430	1380	1410	1410	1280	7800	10400	31880	34000	18950	14050	13500

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-55, 1958, 1989-93 BY WATER YEAR (WY)

MEAN	113	110	106	74.8	78.2	102	202	392	448	201	173	143
MAX	192	196	258	131	160	188	683	1448	1265	416	333	288
(WY)	1989	1992	1958	1958	1958	1958	1952	1952	1952	1990	1989	1958
MIN	23.3	23.2	23.0	23.0	15.8	25.8	30.0	42.3	137	90.9	61.9	55.9
(WY)	1993	1993	1993	1993	1991	1992	1991	1957	1957	1954	1954	1955

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1951-55, 1958, 1989-93

	1992	1993	1951-55	1958	1989-93
TOTAL	31527	69317			
ANNUAL MEAN	86.1	190	184		
HIGHEST ANNUAL MEAN			385		
LOWEST ANNUAL MEAN			125		
HIGHEST DAILY MEAN	251	1260	2120	May 4	1952
LOWEST DAILY MEAN	21	22		Nov 17	1957
ANNUAL SEVEN-DAY MINIMUM	23	23		Nov 16	1957
ANNUAL RUNOFF (AC-FT)	62530	137500	133600		
10 PERCENT EXCEEDS	198	462	331		
50 PERCENT EXCEEDS	26	144	121		
90 PERCENT EXCEEDS	23	23	26		

e Estimated

## WEBER RIVER BASIN

223

10130000 SILVER CREEK NEAR WANSHIP, UT

LOCATION.--Lat 40°45'25", long 111°28'15", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 2, T. 1 S., R. 4 E., Summit County, Hydrologic Unit 16020101, on right bank 50 ft downstream from culvert at crossover between interstate 80 lanes, 4 mi upstream from mouth, 4.5 mi southwest of Wanship.

DRAINAGE AREA.--27.9 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1941 to September 1946, July 1982 to September 1985, October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,360 ft above sea level, from topographic map. October 1941 to September 1946, July 1982 to September 1985 water-stage recorder at approximately same site at different datums.

REMARKS.--Records poor. Several diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 430 ft<sup>3</sup>/s Apr. 4, 1942, gage height, 4.28 ft, site and datum then in use; minimum, practically no flow at times in 1942 and 1943.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 140 ft<sup>3</sup>/s May 7; minimum daily discharge, 1.7 ft<sup>3</sup>/s Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.0	e4.5	e3.1	e2.4	e3.1	e38	e10	e7.5	e5.9	4.8	e4.5
2	1.9	4.0	e4.5	e2.8	e2.8	e3.1	e25	e9.0	e9.0	e6.1	3.1	e4.1
3	2.0	3.8	e3.8	e2.5	e3.1	e3.1	e15	e8.5	e8.0	e6.3	3.0	e3.8
4	2.2	3.0	e3.7	e2.2	e2.9	e3.2	e12	e18	e7.0	e6.4	3.7	e3.7
5	2.2	3.0	e4.3	e2.0	e2.7	e3.3	e15	e36	e7.0	e6.4	3.8	4.1
6	2.0	2.9	e5.6	e2.3	e3.0	e3.6	e12	e27	e6.5	e6.4	5.4	4.0
7	2.0	2.9	e5.5	e2.5	e3.3	e4.3	e8.4	e140	e6.0	e6.4	8.1	2.9
8	2.1	2.9	e5.5	e2.7	e3.3	e4.5	e7.2	e75	e7.4	e6.4	4.9	3.7
9	2.1	2.8	e5.6	e3.0	e3.2	e6.3	e7.6	e35	e5.8	e6.3	5.8	4.2
10	2.0	2.4	e5.3	e2.8	e3.0	e6.8	e8.0	e24	e5.0	e6.3	5.4	4.0
11	1.9	2.4	e5.3	e2.5	e3.1	e6.7	e8.2	e22	e4.8	e6.3	6.8	4.7
12	2.1	2.6	e4.7	e2.7	e3.0	e5.4	e7.6	e21	e4.8	e6.2	5.9	3.9
13	2.3	2.8	e4.0	e2.8	e2.9	e5.6	e7.6	e19	e4.9	e6.2	5.7	5.2
14	2.3	2.6	e3.4	e2.6	e2.7	e6.2	e7.3	e18	e5.5	5.9	6.5	4.9
15	2.4	4.2	e3.1	e2.5	e2.5	e7.0	e6.9	e19	e6.4	5.9	5.8	4.7
16	2.6	5.0	e2.7	e3.4	e2.7	e7.0	e6.7	e16	e7.5	6.6	5.3	5.2
17	2.7	4.6	e3.1	e3.3	e2.7	e8.2	e6.6	e13	e8.7	5.6	5.0	4.2
18	2.6	4.4	e2.9	e3.8	e2.8	e12	e6.6	e11	e9.4	3.9	4.4	4.1
19	2.5	5.0	e2.7	e3.6	e3.0	e12	e6.8	e9.5	e8.5	4.0	5.0	5.6
20	2.5	5.0	e2.8	e3.5	e3.0	e33	e7.0	e8.0	e7.5	3.3	5.3	5.2
21	2.5	4.8	e3.1	e3.8	e3.0	e46	e7.2	e9.0	e6.8	3.6	7.1	5.4
22	2.5	4.1	e3.2	e3.7	e3.1	e43	e7.3	e14	e6.5	3.0	7.3	5.2
23	2.3	3.5	e3.5	e3.2	e3.1	e42	e7.5	e12	e6.4	5.4	6.0	4.9
24	2.4	e3.2	e3.2	e3.2	e3.1	e40	e7.7	e10	e6.6	11	6.2	5.0
25	2.5	e3.2	e3.0	e2.4	e3.0	e50	e7.9	e8.5	e6.7	7.4	4.6	5.2
26	2.4	e3.4	e3.2	e2.6	e2.6	e70	e8.2	e7.5	e6.5	9.7	5.0	5.9
27	2.4	e3.6	e4.0	e2.4	e2.7	e58	e8.5	e7.0	e6.3	8.5	e5.8	5.7
28	2.5	e3.2	e3.8	e2.3	e2.9	e56	e9.0	e6.5	e6.2	5.1	e5.2	5.2
29	2.4	e3.1	e3.4	e2.3	---	e66	e10	e6.0	e6.0	4.3	e4.8	5.0
30	2.7	e3.4	e3.2	e2.2	---	e50	e12	e5.5	e5.9	3.9	e4.2	4.3
31	2.8	---	e3.0	e2.1	---	e36	---	e6.1	---	4.1	e4.8	---
TOTAL	71.5	104.8	119.6	86.8	81.6	701.4	304.8	631.1	201.1	182.8	164.7	138.5
MEAN	2.31	3.49	3.86	2.80	2.91	22.6	10.2	20.4	6.70	5.90	5.31	4.62
MAX	2.8	5.0	5.6	3.8	3.3	70	38	140	9.4	11	8.1	5.9
MIN	1.7	2.4	2.7	2.0	2.4	3.1	6.6	5.5	4.8	3.0	3.0	2.9
AC-FT	142	208	237	172	162	1390	605	1250	399	363	327	275

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1993, BY WATER YEAR (WY)

	MEAN	6.23	6.11	4.74	3.84	4.70	15.5	26.0	13.7	8.89	2.67	2.55	3.63
MAX	12.5	9.49	7.82	5.82	7.40	33.9	45.6	35.6	29.5	6.70	7.73	8.38	
(WY)	1986	1992	1985	1985	1991	1943	1942	1983	1983	1985	1983	1984	
MIN	2.26	2.77	2.11	2.00	2.91	5.67	4.25	3.13	.86	.39	.000	.37	
(WY)	1945	1945	1945	1944	1993	1992	1992	1992	1946	1944	1942	1942	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1942 - 1993

ANNUAL TOTAL	1174.3	2788.7	
ANNUAL MEAN	3.21	7.64	
HIGHEST ANNUAL MEAN			8.14
LOWEST ANNUAL MEAN			14.7
HIGHEST DAILY MEAN	6.6	Mar 5	140
LOWEST DAILY MEAN	1.2	Jul 27	1.7
ANNUAL SEVEN-DAY MINIMUM	1.3	Aug 3	2.0
ANNUAL RUNOFF (AC-FT)	2330		5530
10 PERCENT EXCEEDS	5.3		12
50 PERCENT EXCEEDS	3.0		4.8
90 PERCENT EXCEEDS	1.4		2.5

e Estimated





## 225

LOCATION.--Lat 40°55'14", long 111°24'03", in NW¼, NE¼, SE¼, sec. 8, T. 2 N., R. 5 E., Summit County, Hydrologic Unit 16020101, on left bank 100 ft downstream from bridge on U.S. Highway 189 in Coalville and 0.3 mi upstream from mouth.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,560.6 ft above sea level. Prior to Feb. 13, 1931, nonrecording gage at site 100 ft upstream at different datum. Feb. 13, 1931 to Oct. 15, 1941, water-stage recorder at site 300 ft upstream at different datum. Oct. 16, 1941 to Sept. 30, 1987 at datum 3.0 ft lower.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Diversions above station used for irrigation of land in the drainage basin above the station. Flow slightly affected by Chalk Creek Reservoir, capacity, 1,600 acre-ft.

Minimum discharge, 3.3 ft<sup>3</sup>/s Oct. 8.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	17	17	16	15	17	87	158	505	138	59	37
2	7.6	23	19	16	15	18	112	151	482	130	50	38
3	6.3	20	18	15	15	16	96	160	543	132	49	35
4	6.3	15	12	15	14	16	97	363	e460	135	45	33
5	6.3	16	14	15	14	19	122	408	e462	132	46	32
6	6.2	16	15	16	15	18	107	373	e428	130	45	30
7	6.3	16	16	16	14	18	85	591	e395	128	43	30
8	6.1	18	16	16	15	19	82	411	e361	123	51	32
9	6.3	18	17	16	15	21	94	331	e328	114	59	33
10	6.3	14	18	16	16	27	124	330	308	101	61	30
11	6.5	12	19	15	16	29	115	359	337	90	69	25
12	6.7	16	18	14	15	20	102	394	351	82	67	24
13	6.4	18	17	15	14	22	86	443	329	74	62	26
14	6.3	16	13	16	12	28	80	540	302	73	54	27
15	6.7	17	16	16	14	31	85	623	311	75	58	23
16	7.2	18	17	18	15	31	83	698	299	77	57	21
17	6.9	17	17	17	15	35	91	722	295	72	51	21
18	6.8	18	17	17	16	49	142	700	290	61	53	24
19	6.3	17	17	17	17	49	124	735	265	64	47	22
20	7.1	17	16	16	16	54	108	756	258	61	44	21
21	7.3	17	17	17	16	60	101	808	263	50	54	21
22	7.5	15	17	17	17	55	125	1420	275	57	53	22
23	6.8	19	16	13	17	63	156	1060	259	70	48	22
24	6.3	9.2	15	15	17	73	130	901	230	109	50	22
25	6.8	7.8	15	15	16	78	111	883	209	86	49	21
26	8.3	10	14	14	14	96	121	897	196	147	49	21
27	8.8	13	15	15	15	105	161	846	182	131	45	21
28	9.1	15	15	14	16	113	158	701	164	94	39	21
29	11	17	16	15	---	117	162	628	153	84	34	21
30	16	14	15	15	---	102	171	592	147	77	39	20
31	21	---	15	14	---	87	---	542	---	69	38	---
TOTAL	242.2	476.0	499	482	426	1486	3418	18524	9387	2966	1568	776
MEAN	7.81	15.9	16.1	15.5	15.2	47.9	114	598	313	95.7	50.6	25.9
MAX	21	23	19	18	17	117	171	1420	543	147	69	38
MIN	6.1	7.8	12	13	12	16	80	151	147	50	34	20
AC-FT	480	944	990	956	845	2950	6780	36740	18620	5880	3110	1540

MEAN	21.1	23.5	20.8	20.5	23.4	39.0	117	282	176	46.0	23.2	21.2
MAX	66.7	60.3	54.2	49.8	94.6	168	378	775	811	194	89.9	69.2
(WY)	1983	1985	1984	1984	1986	1986	1986	1986	1983	1983	1984	1983
MIN	1.00	4.57	8.52	8.93	11.6	15.9	13.7	6.90	1.70	1.55	1.48	1.00
(WY)	1935	1935	1940	1961	1940	1964	1934	1934	1934	1934	1934	1934

ANNUAL TOTAL	9328.2			40250.2					
ANNUAL MEAN	25.5			110				68.0	
HIGHEST ANNUAL MEAN								197	1986
LOWEST ANNUAL MEAN								8.66	1934
HIGHEST DAILY MEAN	114	May 9		1420	May 22		1420		May 22 1993
LOWEST DAILY MEAN	6.1	Jul 25		6.1	Oct 8		1.0		Jun 8 1934
ANNUAL SEVEN-DAY MINIMUM	6.3	Oct 3		6.3	Oct 3		1.0		Aug 19 1934
ANNUAL RUNOFF (AC-FT)	18500			79840			49250		
10 PERCENT EXCEEDS	54			333			182		
50 PERCENT EXCEEDS	18			27			25		
90 PERCENT EXCEEDS	7.2			13			10		

e Estimated

## WEBER RIVER BASIN

## 10131500 ECHO RESERVOIR AT ECHO, UT

LOCATION.--Lat 40°57'50", long 111°25'55", in NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 30, T. 3 N., R. 5 E., Summit County, Hydrologic Unit 16020101, near outlet works at left end of Echo Dam on Weber River, 1.1 mi southeast of Echo.

DRAINAGE AREA.--726 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1930 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,450 ft above sea level (levels by Bureau of Reclamation). Prior to 1932, elevations obtained from mercury gage in valve house and staff gage.

REMARKS.--No estimated daily contents, records good. Reservoir is formed by earthfill, rock-faced dam; storage began in October 1930; dam completed in 1931. Capacity, 73,940 acre-ft between elevation 5,450 ft (bottom of outlet tunnel) and 5,560 ft (top of radial gages in spillway) above mean sea level. Dead storage negligible. Figures given herein represent total contents. Water is used for irrigation of the Echo Project.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 75,420 acre-ft June 13, 1983, elevation, 5,561.0 ft; no contents Sept. 12 to Dec. 3, 1931, Sept. 24 to Nov. 2, 1934, Oct. 12 to Nov. 21, 1944, Oct. 1 to Nov. 15, 1954, Sept. 11-20, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 74,450 acre-ft June 30, elevation, 5,560.3 ft; minimum, 4,070 acre-ft Oct. 1, elevation, 5,483.1 ft.

## Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,480	3,060	5,505	14,920	5,530	36,100	5,555	66,740
5,485	4,720	5,510	18,480	5,535	41,440	5,560	73,940
5,490	6,730	5,515	22,390	5,540	47,200	5,561	75,420
5,495	9,110	5,520	26,620	5,545	53,360		
5,500	11,830	5,525	31,180	5,550	59,880		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4070	7040	10780	14650	18430	22260	37280	47350	71430	74380	66270	53950
2	4160	7230	10910	14760	18550	22470	37920	47690	72060	74170	65990	53400
3	4240	7450	11050	14840	18670	22650	38730	47980	72810	73850	65670	52780
4	4310	7640	11140	14950	18800	22860	39330	48540	73020	73790	65280	52180
5	4380	7770	11230	15050	18970	23130	39960	49580	73000	73530	64980	51610
6	4460	7870	11340	15100	19080	23500	40420	50510	72930	73410	64710	51080
7	4550	7960	11440	15230	19200	23820	40660	51800	72940	73280	64310	50480
8	4630	8060	11560	15360	19410	24100	40980	53330	72870	73020	63940	49920
9	4710	8180	11660	15450	19520	24450	41200	53780	72790	72650	63710	49190
10	4810	8310	11760	15570	19650	24820	41480	53560	72830	72180	63480	48640
11	4910	8440	11900	15710	19830	25210	41720	53790	73250	71800	63350	47980
12	5010	8590	12070	15860	19990	25570	41940	53580	73640	71300	63240	47370
13	5090	8740	12200	16000	20100	25910	42210	53360	73800	70630	63120	46820
14	5170	8910	12320	16120	20150	26290	42290	53880	73770	70180	62860	46390
15	5260	9060	12440	16280	20220	26710	42380	54840	73800	69610	62420	45810
16	5390	9200	12540	16470	20290	27190	42570	56380	73660	68920	62050	45380
17	5480	9330	12650	16600	20340	27630	42730	58030	74010	68310	61580	45040
18	5570	9400	12760	16770	20450	28190	42920	59350	74150	67810	61140	44720
19	5670	9520	12880	16940	20640	28820	43370	60570	74290	67280	60610	44520
20	5770	9650	12990	17060	20810	29390	43860	61840	74160	66720	59980	44460
21	5860	9780	13160	17230	20970	30040	44170	63170	74300	66010	59600	44390
22	5990	9850	13300	17400	21180	30640	44400	64710	74310	65450	59150	44340
23	6080	9980	13410	17540	21320	31250	44690	66490	74270	64960	58720	44180
24	6180	10110	13520	17650	21500	31870	45030	67560	74210	64960	58290	43920
25	6260	10240	13680	17770	21690	32510	45300	68230	74150	65080	57750	43570
26	6320	10370	13800	17820	21810	33270	45550	68990	74100	65400	57140	43330
27	6400	10460	13900	17930	21990	34030	45870	69780	74150	65810	56510	43060
28	6480	10540	14080	18040	22120	34760	46230	70230	74330	66160	56000	42750
29	6570	10610	14200	18150	---	35510	46590	70470	74410	66350	55520	42350
30	6680	10680	14370	18270	---	36090	46980	70730	74450	66440	54910	42110
31	6850	---	14540	18330	---	36670	---	71050	---	66320	54470	---
MAX	6850	10680	14540	18330	22120	36670	46980	71050	74450	74380	66270	53950
MIN	4070	7040	10780	14650	18430	22260	37280	47350	71430	64960	54470	42110
(#)	5490.3	5498.0	5504.4	5509.8	5514.7	5530.6	5539.8	5558.0	5560.3	5554.7	5545.9	5535.6
(*)	+2900	+3830	+3860	+3790	+3790	+14550	+10310	+24070	+3400	-8130	-11850	-12360

CAL YR 1992 . . . . . (\*) -42880

WTR YR 1993 . . . . . (\*) +38160

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.

## WEBER RIVER BASIN

227

10132000 WEBER RIVER AT ECHO, UT

LOCATION.--Lat 40°58'04", long 111°26'13", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 25, T. 3 N., R. 4 E., Summit County, Hydrologic Unit 16020101, on right bank 0.5 mi downstream from Echo Dam, 150 yards upstream from Echo Creek, 0.75 mi southeast of Echo, Ut.

DRAINAGE AREA.--727 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1927 to September 1960, October 1988 to current year. Monthly discharge only October 1958 to September 1960, published in WSP 1734.

GAGE.--Water-stage recorder. Elevation of gage is 5,440 ft above sea level, from Echo Reservoir elevations. Prior to Apr. 18, 1931, staff gage at site 0.3 mi upstream at different datum. Apr. 18, 1931 to Mar. 23, 1950, water-stage recorder at site 0.1 mi downstream at different datum. Mar. 24, 1950 to Sept. 30, 1960 water-stage recorder at site 0.25 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Echo Reservoir (see station 10131500).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,060 ft<sup>3</sup>/s May 13, 1952, gage height 7.34 ft, datum then in use; minimum discharge, 0.15 ft<sup>3</sup>/s Jan. 3, 4, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 1670 ft<sup>3</sup>/s May 28, gage height, 4.56 ft; minimum daily discharge 0.18 ft<sup>3</sup>/s, Dec. 9-12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.89	.40	.29	.48	.34	.55	1.0	187	819	745	405	567
2	.65	.49	.29	.50	.34	.55	1.4	187	684	765	447	587
3	.43	.40	.27	.50	.29	.57	.99	184	952	758	459	603
4	.42	.44	.25	.50	.29	.57	1.1	179	1170	683	461	601
5	.41	.48	.25	.53	.29	.60	1.1	178	1170	641	443	585
6	.40	.50	.21	.50	.25	.64	107	286	1170	613	453	589
7	.40	.53	.21	.44	.25	.63	198	358	1040	621	477	601
8	.42	.45	.20	.44	.23	.61	172	608	873	663	462	602
9	.39	.44	.18	.40	.21	.63	174	881	694	692	430	602
10	.39	.44	.18	.39	.21	.67	175	1010	476	668	397	597
11	.39	.44	.18	.35	.39	.69	175	962	332	655	379	587
12	.39	.44	.18	.34	.50	.64	175	783	476	668	360	577
13	.39	.44	.23	.31	.50	.64	173	722	590	671	368	564
14	.44	.44	.44	.37	.50	.69	172	555	556	667	422	520
15	.44	.44	.42	.51	.50	.90	168	343	738	683	452	490
16	.43	.44	.39	.54	.46	.80	163	244	969	668	479	486
17	.44	.44	.35	.55	.43	.81	163	390	1020	618	496	456
18	.44	.44	.34	.57	.39	.85	163	500	1210	590	527	407
19	.44	.44	.39	.57	.52	.80	170	506	1280	599	557	345
20	.43	.47	.36	.57	.57	.80	181	514	1000	618	554	354
21	.45	.44	.34	.57	.53	.80	189	521	957	652	542	365
22	.50	.44	.32	.57	.51	.80	192	760	1090	640	518	372
23	.49	.44	.29	.57	.55	.80	197	1060	1080	520	499	392
24	.49	.44	.29	.57	.57	.82	197	1340	922	347	514	390
25	.44	.44	.29	.57	.54	.87	197	1500	811	341	591	402
26	.44	.41	.25	.57	.53	.88	197	1480	621	362	616	399
27	.44	.39	.25	.57	.53	.89	197	1540	589	356	595	402
28	.44	.36	.23	.50	.54	.98	197	1650	721	371	579	416
29	.46	.34	.21	.46	---	.93	192	1550	750	367	547	448
30	.50	.34	.33	.39	---	1.0	189	1200	752	395	548	458
31	.41	---	.46	.35	---	.97	---	999	---	407	555	---
TOTAL	14.09	13.04	8.87	15.05	11.76	23.38	4478.59	23177	25512	18044	15132	14764
MEAN	.45	.43	.29	.49	.42	.75	149	748	850	582	488	492
MAX	.89	.53	.46	.57	.57	1.0	198	1650	1280	765	616	603
MIN	.39	.34	.18	.31	.21	.55	.99	178	332	341	360	345
AC-FT	28	26	18	30	23	46	8880	45970	50600	35790	30010	29280

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1993, BY WATER YEAR (WY)

	114	111	93.9	91.4	91.5	90.7	183	598	699	457	384	255
MEAN	114	111	93.9	91.4	91.5	90.7	183	598	699	457	384	255
MAX	205	263	194	175	214	506	580	2158	1682	650	597	492
(WY)	1928	1928	1928	1928	1952	1952	1938	1952	1950	1957	1990	1993
MIN	.45	.43	.29	.43	.42	.75	1.12	27.2	235	156	49.9	23.0
(WY)	1993	1993	1993	1955	1993	1993	1955	1991	1934	1928	1931	1934

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1928 - 1993

ANNUAL TOTAL	64240.01	101193.78	265	1952
ANNUAL MEAN	176	277	566	1934
HIGHEST ANNUAL MEAN			108	1934
LOWEST ANNUAL MEAN			3010	1952
HIGHEST DAILY MEAN	632	1650		May 7 1952
LOWEST DAILY MEAN	.18	.18		Dec 9 1991
ANNUAL SEVEN-DAY MINIMUM	.19	.19		Dec 6 1992
ANNUAL RUNOFF (AC-FT)	127400	200700	191800	
10 PERCENT EXCEEDS	460	741	580	
50 PERCENT EXCEEDS	13	1.0	157	
90 PERCENT EXCEEDS	.39	.34	3.4	

## WEBER RIVER BASIN

## 10132490 LOST CREEK RESERVOIR NEAR CROYDON, UT

LOCATION.--Lat 41°11'05", long 111°23'59", in NW¼, SE¼, NE¼, sec. 8, T. 5 N., R. 5 E., Morgan County, Hydrologic Unit 16020101, 1.9 mi upstream from Hell Canyon and 8.1 mi northeast of Croydon.

DRAINAGE AREA.--123 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1967 to current year.

GAGE.--Indicating float tape in gage house on top of dam until Apr. 29, 1989, water-stage recorder equipped with satellite transmission thereafter. Datum of gage is 5,912.3 ft above sea level, (levels by Bureau of Reclamation).

REMARKS.--Records good. Reservoir is formed by earthfill rock-faced dam; active storage began Apr. 22, 1967. Active capacity, 20,010 acre-ft at elevation 6,005.0 ft above mean sea level. Dead storage, 2,500 acre-ft between elevation 5,835.0 ft (streambed at dam axis) and 5,912.3 ft (top of dead storage). Figures given herein represent active contents. Water is used for irrigation, fish and wildlife propagation along Lost Creek, and irrigation, municipal, and industrial use below confluence of Lost Creek and Weber River.

COOPERATION.--Gage-height record until Apr. 29, 1989, and capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 21,270 acre-ft, May 30, June 1, 1983; elevation, 6,008.4 ft. Minimum since original filling of reservoir, 4,130 acre-ft Sept. 30, 1992, elevation, 5,944.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 19,580 acre-ft June 27-29, elevation, 6,003.8 ft; minimum contents, 3,920 acre-ft Oct. 28, 29, elevation, 5,943.2 ft.

## CAPACITY TABLE (ELEVATION, IN FEET, AND USABLE CONTENTS, IN ACRE-FEET)

5,940	3,410	5,965	8,090	5,990	14,890
5,945	4,200	5,970	9,260	5,995	16,510
5,950	5,050	5,975	10,540	6,000	18,220
5,955	5,980	5,980	11,910	6,005	20,010
5,960	6,990	5,985	13,350		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4130	3950	4000	4120	4310	4490	6080	9480	18220	19490	17420	15440
2	4120	3970	4010	4130	4320	4490	6190	9640	18310	19440	17370	15440
3	4100	3970	4010	4140	4320	4500	6290	9820	18440	19370	17300	15290
4	4100	3980	4010	4140	4330	4510	6380	10080	18540	19280	17240	15120
5	4090	3980	4010	4150	4330	4510	6480	10330	18630	19220	17190	15050
6	4080	3980	4010	4150	4330	4520	6570	10570	18730	19130	17090	14990
7	4080	3990	4010	4160	4340	4530	6650	10840	18820	19050	16990	14930
8	4060	3990	4010	4160	4340	4540	6730	11090	18920	18970	16890	14860
9	4060	3990	4020	4170	4350	4550	6820	11330	18990	18890	16840	14810
10	4060	3990	4030	4180	4360	4560	6920	11560	19090	18820	16810	14730
11	4050	3990	4030	4180	4360	4580	7020	11800	19160	18740	16740	14660
12	4040	3990	4040	4190	4370	4590	7110	12060	19210	18670	16680	14570
13	4020	3990	4050	4190	4380	4610	7200	12390	19270	18590	16620	14520
14	4020	3990	4050	4190	4380	4660	7290	12780	19330	18520	16560	14470
15	4010	3990	4050	4200	4380	4730	7370	13170	19380	18430	16500	14410
16	4000	3990	4050	4210	4390	4800	7460	13590	19410	18350	16440	14380
17	4000	4000	4060	4210	4390	4880	7540	14050	19420	18260	16380	14350
18	3980	4000	4070	4210	4400	4950	7640	14500	19440	18190	16320	14320
19	3980	4000	4070	4220	4410	5020	7760	14920	19480	18110	16260	14300
20	3980	4000	4070	4240	4420	5100	7870	15350	19510	18030	16210	14300
21	3980	4010	4080	4250	4430	5180	7980	15770	19540	17980	16150	14290
22	3960	4010	4080	4260	4440	5260	8090	16160	19560	17900	16090	14270
23	3950	4010	4090	4270	4450	5330	8220	16510	19540	17860	16040	14260
24	3940	4010	4090	4270	4460	5410	8360	16850	19560	17820	15970	14230
25	3940	4010	4090	4270	4470	5490	8490	17110	19560	17780	15910	14210
26	3940	4010	4090	4280	4480	5570	8620	17330	19570	17740	15840	14200
27	3930	4000	4090	4280	4480	5650	8780	17520	19580	17700	15770	14170
28	3920	4000	4100	4290	4480	5730	8940	17700	19580	17650	15700	14140
29	3920	4000	4110	4290	---	5810	9100	17830	19580	17590	15600	14090
30	3930	4000	4120	4300	---	5890	9290	17960	19560	17540	15520	14040
31	3950	---	4120	4300	---	5980	---	18100	---	17490	15450	---
MAX	4130	4010	4120	4300	4480	5980	9290	18100	19580	19490	17420	15440
MIN	3920	3950	4000	4120	4310	4490	6080	9480	18220	17490	15450	14040
(#)	5943.4	5943.7	5944.5	5945.6	5946.6	5955.0	5970.1	5999.2	6003.7	5997.9	5991.7	5987.2
(*)	-180	+50	+120	+180	+180	+1500	+3310	+8810	+1460	-2070	-2040	-1410

CAL YR 1992 . . . . (\*) -6120  
WTR YR 1993 . . . . (\*) +9910

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.  
e Estimated

WEBER RIVER BASIN

229

10133540 KIMBALL CREEK ABOVE EAST CANYON CREEK NEAR PARK CITY, UT

LOCATION.--Lat 40°43'31", long 111°30'49", in NW¼, NE¼, NE¼, sec. 20, T. 1 S., R. 4 E., Summit County, Hydrologic Unit 16020101, on right bank below foot-bridge in State rest area along Interstate I-80, 1.5 mi east of Kimball Junction and 5.5 mi north of Park City.

DRAINAGE AREA.--12.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WRD UT-92-1: 1991.

GAGE.--Water-stage recorder. Elevation of gage is 6,360 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 221 ft<sup>3</sup>/s May 7, 1993, gage height, 5.17 ft; minimum daily discharge, .01 ft<sup>3</sup>/s many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 221 ft<sup>3</sup>/s May 7, gage height, 5.17 ft; minimum daily discharge, .01 ft<sup>3</sup>/s many days during October, November, July, and August.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.01	.02	.06	e.18	.48	e23	7.8	2.2	e.01	.01	e.19
2	.01	.03	.03	.08	e.18	.55	e17	6.3	1.9	e.01	.01	e.17
3	.01	.02	.03	e.09	e.19	.58	e14	6.2	3.1	e.01	.01	e.35
4	.01	.01	.03	e.06	e.20	.62	e11	32	2.3	e.01	.01	e.61
5	.01	.01	.02	e.05	e.21	.65	e13	22	2.5	e.01	.02	.59
6	.01	.01	.03	e.06	.23	.64	e11	46	2.1	e.01	.02	.64
7	.01	.01	.02	e.07	.24	.70	e9.0	114	1.8	e.01	.01	.72
8	.01	.01	.03	e.07	.26	.75	e7.5	44	3.3	e.01	.02	.80
9	.01	.01	.03	e.06	.26	.82	e7.8	23	1.9	e.01	.03	.82
10	.01	.01	.05	e.06	.22	.85	e9.0	16	e1.2	e.01	.02	.84
11	e.01	.01	.07	e.06	.25	.90	e8.3	16	e.58	e.01	.03	.81
12	.01	.01	.06	e.07	.24	.89	e7.2	16	e.32	e.02	.02	.83
13	.01	.01	.06	e.07	.26	.90	e6.5	12	e.23	e.02	.02	.87
14	.01	.01	.07	e.09	.30	.98	e5.6	14	e.16	.03	.02	.92
15	.01	.01	.07	e.09	.31	1.2	e5.1	14	e.14	.03	.01	.85
16	.01	.01	.06	e.09	.32	1.3	e5.0	11	e.30	.04	.01	.86
17	.01	.01	.06	e.10	.31	1.7	e4.7	9.3	e.60	.04	.01	.85
18	.01	.01	.06	e.10	.31	2.1	e4.6	8.5	e.50	.05	.01	.85
19	.01	.01	.06	e.11	.35	2.1	e4.6	7.4	e.25	.05	.01	.82
20	.01	.01	.06	e.13	.39	2.4	e4.6	6.2	e.18	.06	.01	.80
21	.01	.01	.05	e.15	.41	13	e4.6	5.7	e.14	.04	.01	.75
22	.01	.01	.05	e.15	.42	e25	e4.7	12	e.12	.04	.01	.74
23	.01	.01	.05	e.13	.37	e23	e5.0	6.7	e.12	.20	.02	.71
24	.01	.01	.06	e.13	.40	e65	e5.6	5.4	e.12	.31	.02	.73
25	.01	.02	.05	e.13	.42	e56	e6.5	4.5	e.12	.06	.02	.71
26	.01	.02	.04	e.13	.45	e43	e7.6	3.8	e.09	.29	.02	.73
27	.01	.01	.04	e.12	.45	e39	e6.4	3.6	e.07	.05	e.04	.70
28	.01	.02	.04	e.12	.45	e44	e7.2	3.5	e.04	.02	e.04	.71
29	.01	.02	.06	e.14	---	e33	e7.5	3.3	e.02	.02	e.03	.65
30	.01	.02	.06	e.16	---	e27	e9.3	3.2	e.02	.01	e.03	.66
31	.01	---	.05	e.18	---	e22	---	2.7	---	.01	e.20	---
TOTAL	0.32	0.38	1.47	3.11	8.58	411.11	242.9	486.1	26.42	1.50	0.75	21.28
MEAN	.010	.013	.047	.10	.31	13.3	8.10	15.7	.88	.048	.024	.71
MAX	.02	.03	.07	.18	.45	.65	.23	114	3.3	.31	.20	.92
MIN	.01	.01	.02	.05	.18	.48	4.6	2.7	.02	.01	.01	.17
AC-FT	.6	.8	2.9	6.2	17	815	482	964	52	3.0	1.5	42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1993, BY WATER YEAR (WY)

	1990	1991	1992	1993
MEAN	.030	.033	.048	.071
MAX	.051	.055	.062	.10
(WY)	1990	1990	1992	1993
MIN	.010	.013	.020	.046
(WY)	1993	1993	1991	1990

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1990 - 1993
ANNUAL TOTAL	74.90	1203.92	
ANNUAL MEAN	.20	3.30	1.34
HIGHEST ANNUAL MEAN			3.30
LOWEST ANNUAL MEAN			.21
HIGHEST DAILY MEAN	1.3 Apr 18	114 May 7	114 May 7
LOWEST DAILY MEAN	.01 Jul 6	.01 Oct 2	.00 Jul 7
ANNUAL SEVEN-DAY MINIMUM	.01 Jul 6	.01 Oct 2	.00 Aug 21
ANNUAL RUNOFF (AC-FT)	149	2390	968
10 PERCENT EXCEEDS	.94	8.4	2.8
50 PERCENT EXCEEDS	.05	.13	.06
90 PERCENT EXCEEDS	.01	.01	.01

e Estimated



## WEBER RIVER BASIN

10133600 McLEOD CREEK NEAR PARK CITY, UT

LOCATION.--Lat 40°41'15", long 111°31'58", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 31, T. 1 S., R. 4 E., Summit County, Hydrologic Unit 16020101, 50 ft below channel dividing structure, 3.2 mi northwest of Park City.

DRAINAGE AREA.--8.78 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,590 ft above sea level, from topographic map.

REMARKS.--Records good except for winter period, which is fair.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 100 ft<sup>3</sup>/s May 22; minimum daily discharge, 0.69 ft<sup>3</sup>/s Jan. 9, 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	8.5	7.6	5.0	2.3	1.7	21	12	73	23	10	6.3
2	4.9	14	10	4.3	2.4	1.6	22	13	77	21	9.5	5.8
3	5.2	7.6	10	4.4	2.6	1.6	19	14	79	21	10	5.6
4	5.5	5.7	9.6	4.4	2.4	1.9	20	29	61	21	9.7	5.8
5	5.2	6.7	9.6	4.4	2.0	2.0	21	24	64	18	8.7	5.8
6	5.6	7.8	9.4	4.3	2.0	2.0	13	28	57	16	8.0	5.7
7	5.8	9.1	9.2	3.4	1.8	2.1	12	40	57	14	8.2	5.7
8	5.7	8.5	9.7	2.6	2.1	2.1	12	35	50	12	11	5.5
9	6.1	7.7	10	.69	2.3	2.5	13	28	43	12	9.5	5.8
10	6.7	5.9	11	.72	1.9	3.1	13	26	40	13	9.6	6.1
11	6.2	5.3	11	.69	1.7	3.7	12	25	39	12	9.3	6.1
12	6.0	5.4	11	.75	1.7	4.3	12	26	42	12	9.5	5.5
13	5.7	8.7	8.9	7.8	1.5	6.3	12	29	43	14	8.3	5.2
14	5.4	9.0	8.7	6.6	1.3	8.3	11	32	43	13	8.1	5.7
15	4.4	9.4	8.9	4.1	1.5	11	11	37	43	12	7.9	5.6
16	4.5	9.4	9.1	4.2	1.5	13	11	45	47	12	7.4	5.7
17	4.8	9.9	9.1	3.9	1.5	14	11	49	56	12	7.8	7.1
18	4.6	9.9	9.0	4.6	1.4	15	14	51	47	11	8.0	7.2
19	5.1	9.2	9.1	4.4	2.5	14	15	56	42	11	7.7	7.2
20	5.1	7.9	9.1	3.9	2.7	15	12	71	41	10	8.1	7.0
21	5.6	6.3	9.0	4.4	1.9	15	12	82	41	10	8.7	7.2
22	5.7	5.9	9.0	4.4	2.0	14	12	100	41	10	9.0	7.0
23	5.9	6.9	8.2	3.8	2.4	14	13	89	39	17	7.8	6.9
24	6.1	6.5	6.9	3.6	2.4	18	14	79	35	13	7.3	7.0
25	7.5	4.9	7.5	2.8	2.1	27	13	79	31	12	7.6	6.6
26	6.6	5.3	7.0	2.7	1.9	26	14	84	27	14	8.2	7.2
27	6.4	5.5	6.1	3.0	1.8	24	14	88	26	12	8.4	7.1
28	6.8	5.9	6.3	2.9	1.7	25	13	86	25	11	7.0	6.5
29	7.4	5.5	6.0	2.9	---	23	14	85	25	10	6.5	6.5
30	9.5	5.2	5.4	3.1	---	21	14	80	24	9.1	6.0	6.5
31	9.3	---	5.6	3.1	---	20	---	74	---	9.2	6.5	---
TOTAL	183.8	223.5	267.0	118.60	55.3	352.2	420	1596	1358	417.3	259.3	188.9
MEAN	5.93	7.45	8.61	3.83	1.97	11.4	14.0	51.5	45.3	13.5	8.36	6.30
MAX	9.5	14	11	7.8	2.7	27	22	100	79	23	11	7.2
MIN	4.4	4.9	5.4	.69	1.3	1.6	11	12	24	9.1	6.0	5.2
AC-FT	365	443	530	235	110	699	833	3170	2690	828	514	375

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1993, BY WATER YEAR (WY)

	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
MEAN	6.76	7.48	6.69	4.32	4.64	9.64	10.5	25.6	30.6	9.43	6.51	5.75
MAX	7.58	7.74	8.61	5.45	5.96	11.4	14.0	51.5	45.3	13.5	8.36	6.38
(WY)	1992	1992	1993	1992	1991	1993	1993	1993	1993	1993	1993	1991
MIN	5.93	7.25	4.68	3.69	1.97	8.70	7.38	8.05	5.85	5.33	3.65	4.56
(WY)	1993	1991	1991	1991	1993	1992	1992	1992	1992	1992	1992	1992

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1991 - 1993

ANNUAL TOTAL	2346.3	5439.90	
ANNUAL MEAN	6.41	14.9	10.7
HIGHEST ANNUAL MEAN			14.9
LOWEST ANNUAL MEAN			6.42
HIGHEST DAILY MEAN	14	100	100
LOWEST DAILY MEAN	2.9	.69	.69
ANNUAL SEVEN-DAY MINIMUM	3.1	1.5	1.5
ANNUAL RUNOFF (AC-FT)	4650	10790	7730
10 PERCENT EXCEEDS	9.1	40	17
50 PERCENT EXCEEDS	6.0	8.7	7.1
90 PERCENT EXCEEDS	4.1	2.5	3.7

WEBER RIVER BASIN

231

10133895 EAST CANYON CREEK ABOVE BIG BEAR HOLLOW NEAR PARK CITY, UT

LOCATION.--Lat 40°47'21", long 111°35'48", in SW1/4NW1/4SE1/4, sec. 27, T. 1 N., R. 3 E., Summit County, Hydrologic Unit 16020101 on left bank, 100 ft above Big Bear Hollow, 2.2 mi north of Jeremy Ranch and 10 mi northwest of Park City.

DRAINAGE AREA.--75.0 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,120 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, from rating curve extended above 510 ft<sup>3</sup>/s, 866 ft<sup>3</sup>/s May 7, 1993, gage height, 8.55 ft from highwater marks; minimum daily discharge, 0.75 ft<sup>3</sup>/s July 31, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 866 ft<sup>3</sup>/s May 7, gage height, 8.55 ft from highwater marks; minimum daily discharge, 1.1 ft<sup>3</sup>/s Oct. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.6	7.6	9.7	e8.5	6.3	e16	77	e98	134	51	20	10
2	e3.1	39	10	e8.0	9.1	e18	68	e140	134	49	19	9.4
3	e3.3	12	10	e7.3	13	e23	61	e134	156	51	19	8.9
4	e6.2	8.2	8.2	e6.8	11	e29	61	e138	136	48	20	8.9
5	e6.0	6.6	7.6	e6.2	e10	e32	81	e170	131	47	21	8.8
6	e7.2	6.6	8.4	e6.6	e12	e35	69	e320	127	43	18	8.7
7	e7.0	7.1	9.9	e7.2	e14	e35	69	e550	128	41	18	8.5
8	e7.4	8.2	9.3	e7.6	e16	e35	71	e165	126	35	19	8.1
9	e6.1	7.8	11	e8.2	e16	e39	70	e158	109	33	25	8.2
10	e4.6	6.6	18	e8.0	e16	e41	69	e152	96	32	20	7.8
11	e5.0	5.8	e19	e7.6	e15	e38	67	135	93	30	21	7.5
12	e5.1	6.0	e19	e7.0	e14	e38	e63	136	91	28	20	7.0
13	e4.8	7.2	e18	e6.8	e13	e46	e61	135	91	28	19	6.9
14	e4.6	8.6	e14	e6.8	e12	e52	e59	143	90	28	18	7.7
15	3.1	9.4	e9.0	e7.5	e12	e58	e58	157	89	25	17	8.2
16	1.5	10	e9.5	e7.5	e14	e64	e59	155	88	24	15	7.3
17	1.1	10	e10	e7.4	e15	e73	e63	160	102	25	15	9.6
18	1.6	11	e10	e8.0	e17	e69	e65	157	104	25	15	9.9
19	1.7	11	e8.5	e7.6	e19	e67	e68	158	89	23	14	11
20	1.8	12	e8.0	e7.4	e16	e67	e73	159	83	22	14	11
21	1.2	11	e8.2	e8.6	e15	e72	e78	170	81	21	17	9.4
22	1.7	10	e8.8	e8.2	e16	e85	e80	230	83	23	16	9.6
23	1.9	9.3	e8.8	e7.4	e17	e100	e82	195	79	39	15	10
24	2.1	9.8	e8.2	e6.8	e16	e125	e83	176	74	54	14	9.8
25	2.6	9.0	e7.6	e7.5	e13	e175	e84	166	68	32	14	9.6
26	3.8	9.4	e7.6	e6.4	e12	e220	e85	162	63	53	14	9.7
27	2.8	8.5	e8.0	e6.6	e12	e156	e87	157	57	34	13	10
28	3.3	10	e9.8	e6.4	e14	e174	e92	156	55	28	13	10
29	4.6	8.9	e8.8	e6.2	---	e190	e95	155	53	25	11	9.5
30	8.2	8.7	e8.2	e6.2	---	e145	e96	149	53	22	10	9.4
31	11	---	e8.0	6.3	---	e115	---	144	---	21	11	---
TOTAL	131.0	295.3	319.1	224.6	385.4	2432	2194	5380	2863	1040	515	270.4
MEAN	4.23	9.84	10.3	7.25	13.8	78.5	73.1	174	95.4	33.5	16.6	9.01
MAX	11	39	19	8.6	19	220	96	550	156	54	25	11
MIN	1.1	5.8	7.6	6.2	6.3	16	58	98	53	21	10	6.9
AC-FT	260	586	633	445	764	4820	4350	10670	5680	2060	1020	536

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1993, BY WATER YEAR (WY)

	1990	1991	1992	1993
MEAN	8.28	10.7	10.3	15.0
MAX	9.95	11.9	12.6	20.5
(WY)	1992	1992	1990	1991
MIN	4.23	9.84	8.96	7.25
(WY)	1993	1993	1991	1990

SUMMARY STATISTICS

	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1990 - 1993
ANNUAL TOTAL	3882.55	16049.8	
ANNUAL MEAN	10.6	44.0	24.0
HIGHEST ANNUAL MEAN			44.0
LOWEST ANNUAL MEAN			11.3
HIGHEST DAILY MEAN	46	550	550
LOWEST DAILY MEAN	1.75	1.1	1.75
ANNUAL SEVEN-DAY MINIMUM	1.5	1.5	1.5
ANNUAL RUNOFF (AC-FT)	7700	31830	17390
10 PERCENT EXCEEDS	18	135	60
50 PERCENT EXCEEDS	9.3	16	12
90 PERCENT EXCEEDS	3.6	6.6	6.2

e Estimated

## WEBER RIVER BASIN

## 10134000 EAST CANYON RESERVOIR NEAR MORGAN, UT

LOCATION.--Lat 40°55'14", long 111°35'59", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 10, T. 2 N., R. 3 E., Morgan County, Hydrologic Unit 16020102, on upstream face of concrete dam on East Canyon Creek, 9.0 mi southeast of Morgan.

DRAINAGE AREA.--144 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1931 to current year. October 1931 to September 1937, month-end contents only published in WSP 1314.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1989, elevations determined from direct readings on upstream face of dam on days shown. Datum of gage is 5,577.0 ft above sea level, (levels by Bureau of Reclamation). Prior to Oct. 1, 1953, staff gage at site 500 ft east of dam and Oct. 1, 1953 to Sept. 30, 1964, tape gage on upstream face of dam then in use at different datum. Oct. 1, 1964 to Sept. 30, 1965, temporary reference marks at present datum set by Bureau of Reclamation.

REMARKS.--Records good. Reservoir was formed in 1896 by a 58-ft rockfill dam, capacity, 3,850 acre-ft, which was raised 25 ft in 1900, capacity, 9,000 acre-ft, raised 12 ft more in 1902, capacity, 14,000 acre-ft, was replaced in 1917 by concrete dam which formed a reservoir having a capacity of 25,790 acre-ft (revised), and was replaced in 1966 by present concrete thin-arch dam which forms a reservoir having an active capacity of 48,110 acre-ft between elevation 5,577.0 ft and 5,705.0 ft. Dead storage, 3,090 acre-ft. Figures given herein represent active contents. Water is used for irrigation in Morgan, Davis, and Weber Counties.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 49,840 acre-ft June 1, 1983, elevation, 5,707.5 ft; no contents at times in 1931, 1934, 1937, 1946, 1954, 1961, 1965, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 48,980 acre-ft June 2, 4, elevation, 5,706.3 ft; minimum, 16,050 acre-ft Oct. 15, elevation, 5,643.2 ft.

## Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,640	14,890	5,670	27,550	5,700	44,760
5,645	16,720	5,675	30,080	5,705	48,110
5,650	18,660	5,680	32,730	5,710	51,610
5,655	20,710	5,685	35,530		
5,660	22,870	5,690	38,470		
5,665	25,150	5,695	41,550		

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16170	16330	17260	18060	19110	20230	27240	e34160	48960	48450	47040	38600
2	16140	16400	17290	18100	19140	20260	27620	e34410	48980	48450	46760	38440
3	16120	16480	17310	18120	19180	20300	28050	e34660	48970	48430	46490	38340
4	16110	16520	17320	18170	19210	20340	28330	34990	48980	48380	46200	38230
5	16100	16560	17320	18200	19240	20380	28650	35450	48960	48430	45950	38120
6	16090	16590	17350	18220	19270	20430	28930	35870	48940	48420	45680	38010
7	16080	16630	17380	18260	19310	20480	29150	36800	48910	48410	45410	37900
8	16070	16660	17410	18310	19340	20530	29350	37870	48940	48330	45140	37790
9	16070	16690	17440	18340	19380	20580	29540	38530	48920	48320	44870	37680
10	16060	16720	17480	18380	19430	20650	29750	39010	48880	48320	44610	37570
11	16060	16740	17510	18420	19490	20720	29960	39450	48850	48310	44340	37460
12	16060	16760	17550	18450	19550	20790	30140	39870	48800	48300	44080	37340
13	16060	16790	17580	18470	19590	20860	30260	40310	48780	48290	43800	37220
14	16060	16820	17600	18500	19620	20930	e30480	40780	48770	48260	43520	37110
15	16050	16840	17630	18540	19640	21010	e30690	41300	48720	48180	43240	37000
16	16060	16870	17640	18570	19680	21100	e30910	41830	48710	48100	42950	36890
17	16060	16890	17670	18610	19710	21220	31130	42350	48690	48040	42670	36790
18	16060	16920	17700	18640	19760	21420	31330	42870	48750	47980	42400	36690
19	16070	16950	17720	18680	19800	21660	31580	43370	48740	47930	42120	36610
20	16100	16980	17730	18710	19840	21910	31800	43860	48720	47870	41840	36530
21	16120	17010	17760	18760	19900	22210	32000	44350	48690	47790	41550	36440
22	16130	17040	17790	18800	19940	22500	32170	44950	48680	47730	41280	36350
23	16130	17080	17810	18840	19990	22790	32360	45570	48650	47690	41000	36260
24	16140	17100	17840	18870	20040	23180	32580	46110	48630	47750	40710	36170
25	16150	17110	17860	18910	20090	23780	32810	46620	48630	47760	40420	36080
26	16160	17120	17880	18930	20120	24500	33000	47080	48570	47800	40130	36000
27	16170	17160	17910	18960	20150	25170	33210	47510	48530	47800	39860	35930
28	16180	17200	17940	18990	20190	25690	33470	47940	48510	47750	39580	35860
29	16200	17220	17970	19020	---	26230	33680	48350	48470	47670	39290	35810
30	16240	17240	18010	19040	---	26650	33910	48680	48450	47520	39020	35750
31	16290	---	18030	19080	---	26970	---	48890	---	47310	38800	---
MAX	16290	17240	18030	19080	20190	26970	33910	48890	48980	48450	47040	38600
MIN	16050	16330	17260	18060	19110	20230	27240	34160	48450	47310	38800	35750
(#)	5643.8	5646.4	5648.4	5651.0	5653.8	5668.8	5682.1	5706.1	5705.5	5703.8	5690.6	5685.4
(*)	+90	+950	+790	+1050	+1110	+6780	+6940	+14980	-440	-1140	-8510	-3050

CAL YR 1992 . . . . (\*) -17410

WTR YR 1993 . . . . (\*) +19550

(#) Elevation, in feet, at end of month.  
 (\*) Change in contents, in acre-feet.  
 (e) Estimated.

## WEBER RIVER BASIN

233

10134500 EAST CANYON CREEK NEAR MORGAN, UT

LOCATION.--Lat 40°55'21", long 111°36'23", in SW $\frac{1}{4}$ , NW $\frac{1}{4}$ , NW $\frac{1}{4}$ , sec. 10, T. 2 N., R. 3 E., Morgan County, Hydrologic Unit 16020102, on right bank 2,500 ft downstream from East Canyon Dam, 2.4 mi upstream from Sheep Canyon, and 8.7 mi southeast of Morgan.

DRAINAGE AREA.--144 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only prior to October 1937, published in WSP 1314.

GAGE.--Water-stage recorder and Lyman rectangular weir. Elevation of gage is 5,460 ft above sea level, from river-profile map.

REVISED RECORDS.--WSP 1634, WDR UT-77-1: Drainage area.

REMARKS.--Records good. No diversions between station and East Canyon Reservoir (see preceding page), which completely regulates flow.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 872 ft<sup>3</sup>/s May 4, 1952, gage height, 3.49 ft; minimum daily, 0.2 ft<sup>3</sup>/s Dec. 19, 29, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 173 ft<sup>3</sup>/s June 4, gage height, 1.15 ft; minimum daily discharge, 4.1 ft<sup>3</sup>/s Nov. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	4.9	4.8	4.7	5.3	5.3	4.8	5.4	141	63	150	101
2	19	5.2	5.0	4.7	5.3	5.3	5.3	5.6	148	61	151	76
3	14	4.9	5.0	4.6	5.3	5.3	5.2	5.9	164	62	152	68
4	14	4.7	4.8	4.4	5.3	5.3	5.3	6.1	167	59	150	68
5	13	4.9	4.9	4.7	5.3	5.3	5.3	5.7	162	57	150	68
6	13	5.0	5.0	4.7	5.3	5.3	5.3	5.9	158	55	150	68
7	13	4.8	4.9	4.7	5.3	5.3	5.2	6.4	152	52	150	68
8	13	4.8	5.1	4.7	5.3	5.3	5.2	6.1	158	49	150	68
9	13	4.7	5.2	4.7	5.3	5.3	5.3	6.4	150	46	150	67
10	11	4.7	4.9	4.7	4.9	5.3	5.3	6.7	136	44	150	67
11	9.1	4.7	4.7	4.7	4.9	5.3	5.3	6.7	128	42	150	67
12	9.0	4.7	4.7	4.7	5.0	5.3	5.3	6.9	120	41	150	67
13	9.3	4.7	4.7	4.7	5.0	5.3	5.3	6.6	113	38	150	67
14	9.2	4.7	4.7	4.7	4.9	5.3	5.3	6.7	109	66	150	67
15	9.0	4.7	4.7	4.5	4.7	5.6	5.3	6.7	111	68	149	67
16	8.3	5.1	4.6	4.5	4.8	5.8	5.2	6.7	111	61	149	67
17	7.1	5.3	4.7	4.4	5.0	6.0	4.8	6.7	110	59	148	66
18	7.0	5.3	4.7	4.3	5.1	6.0	5.1	6.8	118	58	148	62
19	7.2	5.3	4.6	4.4	5.3	6.0	4.9	7.0	115	58	147	59
20	7.2	5.3	4.4	4.5	5.3	5.8	5.0	7.3	110	58	147	59
21	7.3	4.9	4.7	4.6	5.0	5.3	5.3	7.4	104	58	146	60
22	7.1	4.7	4.7	4.6	5.1	5.3	5.3	7.4	102	57	146	60
23	6.9	4.7	4.6	4.7	5.2	5.5	5.3	7.4	98	57	146	60
24	7.0	4.7	4.6	4.7	5.3	5.7	5.3	7.4	93	57	146	60
25	6.9	4.7	4.6	4.7	5.3	6.0	5.3	7.6	88	57	145	56
26	6.9	4.6	4.7	4.6	5.0	5.5	5.3	7.9	84	57	144	54
27	7.2	4.6	4.7	4.7	5.3	5.3	5.3	8.1	79	57	144	50
28	5.9	4.7	4.7	5.0	5.3	5.3	5.3	8.1	74	57	144	48
29	5.1	4.3	4.7	5.3	---	5.3	5.4	15	69	94	144	44
30	5.2	4.1	4.7	5.3	---	5.3	5.3	60	65	109	126	42
31	5.0	---	4.6	5.3	---	4.9	---	113	---	138	118	---
TOTAL	296.9	144.4	147.4	145.5	144.1	168.8	156.8	377.6	3537	1895	4540	1901
MEAN	9.58	4.81	4.75	4.69	5.15	5.45	5.23	12.2	118	61.1	146	63.4
MAX	21	5.3	5.2	5.3	5.3	6.0	5.4	113	167	138	152	101
MIN	5.0	4.1	4.4	4.3	4.7	4.9	4.8	5.4	65	38	118	42
AC-FT	589	286	292	289	286	335	311	749	7020	3760	9010	3770

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1993, BY WATER YEAR (WY)

	MEAN	26.2	15.4	16.7	18.2	23.0	43.4	69.8	88.7	98.3	109	106	67.0
MAX	170	114	210	206	254	337	269	397	378	248	206	172	
(WY)	1969	1970	1984	1984	1985	1986	1948	1952	1983	1964	1975	1983	
MIN	3.66	1.10	1.10	1.26	1.50	1.93	2.68	5.04	7.30	54.5	32.8	6.70	
(WY)	1960	1961	1961	1961	1961	1961	1961	1991	1967	1955	1941	1961	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1938 - 1993

ANNUAL TOTAL	14905.1	13454.5	57.0	
ANNUAL MEAN	40.7	36.9	132	1984
HIGHEST ANNUAL MEAN			17.8	1961
LOWEST ANNUAL MEAN			768	May 5 1952
HIGHEST DAILY MEAN	176	Jun 11	167	Nov 30
LOWEST DAILY MEAN	4.1	Nov 30	4.1	Nov 30
ANNUAL SEVEN-DAY MINIMUM	4.5	Nov 24	4.5	Jan 15
ANNUAL RUNOFF (AC-FT)	29560	26690	41280	1.1
10 PERCENT EXCEEDS	138	144	152	1.20
50 PERCENT EXCEEDS	6.9	5.8	26	Dec 19 1964
90 PERCENT EXCEEDS	4.7	4.7	4.3	Oct 30 1960

## WEBER RIVER BASIN

## 10136500 WEBER RIVER AT GATEWAY, UT

LOCATION.--Lat 41°08'13", long 111°49'54", in NE1/4SW1/4, sec. 27, T. 5 N., R. 1 E., Morgan County, Hydrologic Unit 16020102, on left bank 400 ft downstream from tailrace of Gateway powerplant, 500 ft upstream from Union Pacific Railroad bridge, 1,200 ft downstream from Strawberry Creek, and 3,200 ft east of section house at Gateway.

DRAINAGE AREA.--1,627 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1889 to June 1893, July to December 1893 (gage heights only), August 1894 to September 1899, August to November 1900, January to October 1901, April to June 1903 (gage heights and discharge measurements only), July to August 1919, August 1920 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Uinta" 1889-1903.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,800 ft above sea level, by barometer. Oct. 13, 1889 to July 11, 1903, nonrecording gage at site 1.2 mi downstream at different datum. June 22, 1919 to Oct. 22, 1929, water-stage recorder at site 900 ft upstream at different datum. Oct. 22, 1929 to Nov. 27, 1964, at sites 1,300 ft downstream at different datums.

REMARKS.--Records fair. Many diversions for irrigation above and below station. Water diverted above station by Gateway Canal since July 1957, part of which returns to river above station through tailrace of Gateway hydro-electric powerplant. Flow regulated by Rockport, Echo, Lost Creek, and East Canyon Reservoirs (see stations 10129400, 10131500, 10132490, and 10134000).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,980 ft<sup>3</sup>/s May 31, 1896; minimum recorded, 30 ft<sup>3</sup>/s Dec. 26, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,340 ft<sup>3</sup>/s June 7, gage height, 6.01 ft; minimum recorded, 30 ft<sup>3</sup>/s Dec. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	111	40	38	36	51	620	825	1310	599	370	414
2	71	155	44	48	47	54	911	791	1120	590	390	397
3	71	135	46	45	45	52	700	828	1760	667	401	387
4	58	88	38	e32	46	50	634	1230	2030	672	395	407
5	58	80	41	e33	45	54	695	1150	2100	658	437	397
6	58	90	40	36	39	60	595	1400	2100	541	421	417
7	59	77	40	37	42	57	721	2200	2520	472	426	401
8	53	73	40	40	48	58	654	1820	2450	424	475	418
9	53	74	48	43	46	71	640	1840	1990	442	472	393
10	50	69	51	39	47	81	658	1780	1570	439	452	419
11	49	63	57	36	46	98	639	1760	1310	430	440	441
12	50	53	62	35	46	125	622	1720	1230	442	442	443
13	49	63	55	37	52	121	618	1810	1270	448	420	460
14	49	63	44	39	49	112	586	1960	1150	440	420	477
15	49	55	46	38	38	180	576	1900	1120	458	425	414
16	49	55	40	38	39	304	582	1840	1380	481	426	395
17	49	56	45	42	41	655	574	1880	1460	468	427	442
18	49	53	49	39	45	877	633	1890	1580	437	409	456
19	49	52	48	46	53	733	668	1780	1770	414	427	410
20	50	52	51	79	69	785	647	1780	1520	409	436	378
21	49	52	35	76	67	807	637	1770	1260	416	464	364
22	49	53	41	69	62	668	675	2020	1380	450	492	353
23	49	56	47	79	60	687	735	2040	1440	551	434	352
24	49	56	38	72	58	838	768	2020	1200	583	406	343
25	49	53	37	73	58	1070	753	2180	1060	424	413	359
26	50	57	e35	69	53	1030	752	2120	806	483	444	339
27	49	56	40	46	50	929	805	2050	579	457	436	301
28	49	39	42	46	52	853	823	2130	596	414	434	306
29	55	45	39	56	---	900	842	2150	632	376	425	310
30	122	40	e35	46	---	803	854	1860	606	348	398	315
31	107	---	e37	36	---	664	---	1420	---	363	416	---
TOTAL	1794	2024	1351	1502	1379	13827	20617	54004	42299	14796	13273	11708
MEAN	57.9	67.5	43.6	48.5	49.2	446	687	1742	1410	477	428	390
MAX	122	155	62	79	69	1070	911	2200	2520	672	492	477
MIN	49	39	35	32	36	50	574	791	579	348	370	301
AC-FT	3560	4010	2680	2980	2740	27430	40890	107100	83900	29350	26330	23220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1993, BY WATER YEAR (WY)

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
MEAN	244	215	226	237	282	491	1004	1562	1137	545	461	363	
MAX	896	548	1463	1330	1947	2575	3000	4798	4239	1161	828	1196	
(WY)	1985	1983	1984	1984	1986	1986	1986	1952	1983	1975	1983	1983	
MIN	57.9	58.0	43.6	45.7	49.2	67.8	105	281	293	238	156	62.3	
(WY)	1993	1962	1993	1991	1993	1964	1977	1992	1977	1931	1924	1934	

SUMMARY STATISTICS

	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1921 - 1993
ANNUAL TOTAL	64549	178574	
ANNUAL MEAN	176	489	565
HIGHEST ANNUAL MEAN			1397
LOWEST ANNUAL MEAN			143
HIGHEST DAILY MEAN	463	2520	7390
LOWEST DAILY MEAN	35	32	32
ANNUAL SEVEN-DAY MINIMUM	38	37	35
ANNUAL RUNOFF (AC-FT)	128000	354200	409200
10 PERCENT EXCEEDS	333	1450	1330
50 PERCENT EXCEEDS	129	387	355
90 PERCENT EXCEEDS	49	41	100

e Estimated

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LOCATION.--Lat 41°16'07", long 111°40'24", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 12, T. 6 N. R. 2 E., Weber County, Hydrologic Unit 16020102, on right bank 0.5 mi downstream from Maggie Creek, 0.5 mi upstream from Huntsville Mountain Canal, 5.0 mi downstream from Causey Dam, and 5.0 mi east of Huntsville.

PERIOD OF RECORD.—March 1921 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,190 ft above sea level, by barometer. Prior to Aug. 14, 1934, at site 300 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. One small diversion above station. Flow regulated by Causey Reservoir since Jan. 4, 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft<sup>3</sup>/s May 3, 1952, gage height, 5.98 ft; minimum, 9 ft<sup>3</sup>/s Feb. 28, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 980 ft<sup>3</sup>/s May 15, gage height, 4.66 ft; minimum daily discharge, 20 ft<sup>3</sup>/s Nov. 25 and Dec. 12.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	31	e37	e25	e24	e27	257	385	292	106	65	66
2	27	37	e36	e26	e25	33	306	403	274	106	67	72
3	27	33	31	e27	e26	34	262	440	295	106	68	72
4	26	30	29	e26	e26	32	257	528	254	106	72	73
5	25	30	31	e25	e25	32	279	445	258	104	71	75
6	25	29	30	e25	e24	36	261	526	260	101	72	76
7	25	29	30	e27	e26	39	243	777	278	102	71	76
8	25	30	28	e27	e24	43	231	661	292	98	74	76
9	25	30	26	e27	e25	47	235	577	276	90	70	76
10	25	29	26	e27	e25	54	231	544	259	e88	72	75
11	25	29	26	e27	e27	62	227	558	260	e82	71	74
12	25	29	20	e26	e27	63	224	583	239	e80	68	75
13	25	29	25	e24	e26	58	209	658	224	e82	70	75
14	25	29	e32	e25	e24	57	203	813	211	e82	67	76
15	25	29	e27	e27	e21	64	200	890	202	e80	68	76
16	25	29	e29	e27	e24	95	196	907	192	e74	67	76
17	25	29	e29	e29	e26	189	198	893	192	e72	66	76
18	25	29	e29	e30	e26	286	260	857	179	e68	68	76
19	25	29	e29	e29	e27	251	235	834	169	e65	67	75
20	25	29	e29	e29	e29	247	217	770	156	63	68	75
21	26	29	e27	e28	e27	237	224	693	150	64	73	72
22	26	29	e27	e28	e27	212	266	679	142	67	71	68
23	26	29	e29	e29	e29	220	278	638	138	74	68	69
24	26	28	e27	e23	e29	253	287	539	127	77	68	64
25	26	e20	e26	e24	e29	336	281	365	120	74	68	63
26	26	e25	e25	e25	e28	361	344	264	113	72	67	62
27	26	e30	e24	e24	e24	353	398	445	105	66	67	62
28	26	e34	e25	e25	e26	325	380	454	103	68	67	60
29	28	e29	e26	e24	---	311	402	396	108	67	66	e60
30	39	e35	e27	e25	---	293	408	352	107	66	66	e60
31	35	---	e26	e26	---	262	---	317	---	66	65	---
TOTAL	818	886	868	816	726	4912	7999	18191	5975	2516	2128	2131
MEAN	26.4	29.5	28.0	26.3	25.9	158	267	587	199	81.2	68.6	71.0
MAX	39	37	37	30	29	361	408	907	295	106	74	76
MIN	25	20	20	23	21	27	196	264	103	63	65	60
AC-FT	1620	1760	1720	1620	1440	9740	15870	36080	11850	4990	4220	4230

MEAN	42.7	40.9	43.2	43.3	51.1	92.6	278	432	164	70.5	57.7	47.8
MAX	86.0	94.0	145	108	216	419	704	931	554	149	117	104
(WY)	1985	1984	1984	1971	1986	1986	1986	1984	1983	1975	1984	1984
MIN	22.2	19.2	21.0	21.2	17.0	15.7	26.3	37.7	28.4	23.8	23.1	24.2
(WY)	1978	1978	1978	1977	1977	1977	1977	1934	1934	1934	1934	1934

ANNUAL TOTAL	15116		47966						
ANNUAL MEAN	41.3		131			114			
HIGHEST ANNUAL MEAN						260			1986
LOWEST ANNUAL MEAN						36.8			1977
HIGHEST DAILY MEAN	79	May 19	907	May 16	1640		May 5	1936	
LOWEST DAILY MEAN	20	Nov 25	20	Nov 25	13		Feb 26	1977	
ANNUAL SEVEN-DAY MINIMUM	25	Oct 5	24	Jan 24	13		Feb 28	1977	
ANNUAL RUNOFF (AC-FT)	29980		95140		82590				
10 PERCENT EXCEEDS	65		339		273				
50 PERCENT EXCEEDS	40		66		50				
90 PERCENT EXCEEDS	26		25		32				

e Estimated



## WEBER RIVER BASIN

10139000 PINEVIEW RESERVOIR NEAR OGDEN, UT

LOCATION.--Lat 41°15'20", long 111°50'25", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, sec. 16, T. 6 N., R. 1 E., Weber County, Hydrologic Unit 16020102, at trashback at Pineview Dam on Ogden River 3.8 mi west of Huntsville and 6 mi east of Ogden.

DRAINAGE AREA.--311 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1936 to September 1968, October 1989 to current year.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1989 elevations determined from direct readings of outside staff gage read once daily. Datum of gage is 4818.0 ft above sea level.

REMARKS.--Reservoir is formed by earth-fill, rock-faced dam; storage began Nov. 16, 1936; capacity, 110,100 acre-ft at elevation 4,900 ft (maximum super storage) above sea level. During September 1939, sills of radial spillway gates were raised 1 ft, thus changing the top of spillway gates from elevation 4,871 to 4,872 ft. During 1957 the storage capacity was increased by raising the crest of the spillway to 4,878 ft and elevation of maximum super storage to 4,900 ft (additional capacity, 65,920 acre-ft). Dead storage negligible. Figures given herein represent total contents. Water is used for irrigation in Weber River basin and Ogden River projects.

COOPERATION.--Capacity table provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 112,500 acre-ft June 11, 12, 1993, elevation 4900.8 ft minimum, 4 acre-ft, Jan. 10, 1957, elevation, 4,819.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 112,500 acre-ft June 11, 12, elevation, 4,900.8 ft; minimum contents, 1,800 acre-ft Oct. 1, elevation, 4,831.2 ft.

## CAPACITY TABLE (ELEVATION, IN FEET, AND USABLE CONTENTS, IN ACRE-FEET)

4,830	1,380	4,860	25,480
4,835	3,380	4,865	32,610
4,840	6,150	4,870	40,680
4,845	9,680	4,875	49,700
4,850	14,060	4,880	59,670
4,855	19,330		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1800	2420	e5080	7360	11000	e15800	57900	85000	108200	109100	95600	77300
2	1970	2580	e5130	7470	11100	15900	60100	85700	108500	108700	95100	76700
3	1970	2660	e5190	7540	11200	16100	62200	86500	109100	108300	94300	76300
4	1970	2710	e5240	7620	11300	16300	63800	87600	109400	108200	93500	75700
5	1960	2770	e5290	7590	11300	16500	65700	88700	109500	108000	93000	75200
6	1850	3140	e5350	7770	11600	16700	67500	89700	109600	107800	92400	74600
7	1860	3370	e5400	7900	11700	16900	69200	91300	109800	107600	91800	73900
8	1860	3470	e5450	8010	11900	17100	70700	92600	110400	107100	91300	73100
9	1860	3560	5500	8140	12100	17300	71900	93100	111400	106600	90700	72300
10	1860	e3610	5590	8260	12200	17600	72900	93100	112400	106100	90200	71500
11	1860	e3690	5690	8390	12400	18000	73700	93100	e112500	105500	90300	71200
12	1870	3780	5800	8480	12500	18300	74600	93200	e112500	105000	89700	71000
13	1880	3850	5880	8590	12700	18800	75200	94100	e112000	104300	89100	71000
14	1890	3910	5930	8700	12800	19200	75700	94900	e111700	103700	88500	71000
15	e1900	3990	6000	8810	13000	19700	75900	95700	e111500	103000	87900	71000
16	e1910	4070	6030	8940	13100	20500	76300	96900	111300	102200	87300	70000
17	e1920	4140	6110	9040	13300	22000	76700	98100	111000	101500	86700	68700
18	e1930	4210	6210	9160	13400	25000	77200	99200	111000	100800	86100	68400
19	e1940	4280	6270	9270	13700	27600	78000	100000	110900	100200	85400	68200
20	e1950	4370	6330	9400	13900	29900	78600	100700	110700	99500	84700	68000
21	e1970	e4400	6410	9530	14200	32200	78900	101300	110500	98600	84000	67900
22	e1990	4560	6500	9680	14400	34400	79300	101800	110400	97800	83500	67700
23	e2000	4650	6570	9750	14600	37400	79700	102100	110200	97100	83000	67500
24	e2010	4710	6640	9900	14800	39800	80200	102600	110100	97100	82500	67200
25	e2080	e4760	6690	10000	15000	e40500	80800	103100	110200	97100	81900	67000
26	e2110	e4820	6760	e10100	e15200	e42500	81200	103900	110100	97100	81200	66800
27	e2170	e4870	6850	e10200	e15400	45900	81900	104800	110000	97000	80400	66500
28	e2200	e4920	6940	e10400	e15600	48400	82700	105800	109800	97000	79700	66300
29	e2250	e4970	7070	10500	---	51800	83500	106600	109300	96800	79100	66100
30	e2310	e5030	7170	10600	---	54300	84300	107300	109100	96500	78400	65800
31	e2400	---	7260	10800	---	56200	---	107900	---	96200	77900	---
MAX	2400	5030	7260	10800	15600	56200	84300	107900	112500	109100	95600	77300
MIN	1800	2420	5080	7360	11000	15800	57900	85000	108200	96200	77900	65800
(#)	4832.1	4819.6	4841.7	4846.4	4850.4	4878.3	4890.6	4899.2	4899.7	4895.0	4888.0	4882.8
(*)	+410	+2630	+2230	+3540	+4800	+40600	+28100	+23600	+1200	-12900	-18300	-12100

CAL YR 1992 : : : : (\*) -30040  
WTR YR 1993 : : : : (\*) +63810

(#) Elevation, in feet, at end of month.  
(\*) Change in contents, in acre-feet.  
(e) Estimated.

WEBER RIVER BASIN

237

10139300 WHEELER CREEK NEAR HUNTSVILLE, UT

LOCATION (REVISED).--Lat 41°15'10", long 111°50'29", in NE<sup>1</sup>/<sub>4</sub>,SW<sup>1</sup>/<sub>4</sub>,SE<sup>1</sup>/<sub>4</sub>, sec. 16, T. 6 N., R. 1 E., Weber County, Hydrologic Unit 16020102, on left bank 550 ft upstream from mouth, 200 ft upstream from culvert under State Highway 39, 3.8 mi west of Huntsville, and 7.2 mi east of Ogden.

DRAINAGE AREA.--11.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,800 ft above sea level, from topographic map. Prior to Feb. 25, 1992 at site 0.10 mi downstream at different datum.

REMARKS.--Records poor. Records do not include 987 acre-feet diverted above gage by Ogden City Water Department.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 533 ft<sup>3</sup>/s May 21, 1981, gage height, 3.95 ft from indirect measurement, maximum gage height, 5.76 ft, Feb. 18 or 19, 1986 (backwater from trash buildup on trees below gage). Flood of Feb. 18 or 19, 1986 probably exceeded that of May 21, 1981. No flow Dec. 5, 1962, July 25, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
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Peaks above base not determined.

Maximum daily discharge, 92 ft<sup>3</sup>/s May 15.

Minimum daily discharge, 0.14 ft<sup>3</sup>/s Sept. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.89	e.59	e.45	e.39	e.76	e58	e36	40	12	.93	.32
2	.22	3.2	e.56	e.46	.34	e.70	e62	e40	39	11	.92	.31
3	.17	1.9	.54	e.52	.31	e.72	e54	e43	e47	9.1	.92	.32
4	.20	1.4	e.54	e.58	.32	e.74	e50	e45	e47	6.4	.91	.32
5	.38	1.3	e.54	e.58	.30	.79	e43	e40	e49	9.1	.85	.26
6	.79	1.2	e.52	e.58	.29	.83	e37	e70	e51	8.7	.79	.50
7	.91	1.2	e.50	e.58	.28	.91	e32	e58	e54	6.3	.76	.69
8	.91	1.2	e.50	e.50	.26	1.1	e27	e49	e60	6.7	.79	.79
9	.91	1.0	e.49	e.58	.39	1.2	e27	e45	e67	7.1	.75	.56
10	.88	.78	e.48	e.60	.40	1.6	e23	e52	e70	7.4	.79	.14
11	.86	.68	e.48	e.58	.38	3.7	e26	e56	62	7.5	.71	.20
12	.85	.84	e.47	e.52	.36	e4.0	e27	e50	59	7.7	1.2	.62
13	.84	.83	.47	e.56	.36	3.7	e22	e62	58	7.9	1.2	.93
14	.82	.77	e.58	e.46	.37	3.3	e21	e76	53	7.6	1.1	1.1
15	.81	.78	e.54	e.45	.39	9.2	e23	e92	50	5.4	1.1	1.0
16	.79	.73	e.52	.34	.41	e25	e26	e80	47	3.7	1.5	.99
17	.78	.74	e.52	.30	.41	e35	e26	e70	42	3.9	1.3	1.3
18	.76	.72	e.51	.32	.44	e33	e27	e68	35	3.8	.78	1.2
19	.74	.73	e.50	.32	e.50	e25	e23	e66	32	3.7	.72	1.1
20	.74	.82	e.50	.32	e.60	e24	e21	e65	31	3.6	.66	1.1
21	.70	.63	e.50	.32	e.58	e23	e21	e64	31	3.5	.59	1.1
22	.65	.78	e.49	.34	e.54	e22	e26	e60	28	3.5	.56	1.1
23	.63	.79	.47	.32	e.70	e24	e29	e58	26	5.4	.54	1.1
24	.60	.74	e.50	e.31	e.66	e45	e30	e55	21	8.4	.50	1.1
25	.60	e.70	e.48	e.36	e.60	e54	e29	45	19	5.6	.46	1.1
26	.65	e.58	e.45	e.35	e.70	e66	e30	42	18	5.6	.37	1.1
27	.62	e.58	e.45	e.39	e.78	e58	e33	43	16	3.9	.32	1.1
28	.65	e.58	e.45	e.39	e.80	e54	e36	44	16	1.5	.32	1.0
29	.97	e.58	e.45	e.39	---	e48	e36	44	14	1.3	.31	.93
30	1.7	e.58	e.45	e.39	---	e43	e36	43	14	1.1	.36	.97
31	1.0	---	e.45	e.39	---	e49	---	41	---	.98	.36	---
TOTAL	22.33	28.25	15.49	13.55	12.86	661.25	961	1702	1196	179.38	23.37	24.35
MEAN	.72	.94	.50	.44	.46	21.3	32.0	54.9	39.9	5.79	.75	.81
MAX	1.7	3.2	.59	.60	.80	66	62	92	70	12	1.5	1.3
MIN	.17	.58	.45	.30	.26	.70	21	36	14	.98	.31	.14
AC-FT	44	56	31	27	26	1310	1910	3380	2370	356	46	48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1993, BY WATER YEAR (WY)

MEAN	1.74	2.18	1.93	2.25	4.19	10.0	26.1	35.0	26.3	6.32	2.30	1.53
MAX	6.60	11.0	14.4	13.7	65.8	44.1	61.9	84.4	92.3	22.6	8.68	3.61
(WY)	1983	1988	1965	1971	1986	1986	1984	1984	1975	1975	1983	1983
MIN	.50	.49	.38	.064	.11	.38	1.20	2.27	.41	.31	.26	.20
(WY)	1962	1962	1989	1989	1991	1977	1977	1992	1992	1992	1992	1992

SUMMARY STATISTICS

	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1959 - 1993
ANNUAL TOTAL	575.78	4839.83	
ANNUAL MEAN	1.57	13.3	
HIGHEST ANNUAL MEAN			9.99
LOWEST ANNUAL MEAN			24.2
HIGHEST DAILY MEAN			1.70
LOWEST DAILY MEAN			480
ANNUAL SEVEN-DAY MINIMUM			.00
ANNUAL RUNOFF (AC-FT)	1140	9600	.04
10 PERCENT EXCEEDS	4.7	49	7240
50 PERCENT EXCEEDS	.74	.92	32
90 PERCENT EXCEEDS	.23	.37	2.2
			.50

e Estimated

## WEBER RIVER BASIN

10140100 OGDEN RIVER BELOW PINEVIEW RESERVOIR NEAR HUNTSVILLE, UT

LOCATION.--Lat 41°15'16", long 111°51'18" in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, sec. 17, T. 6 N., R. 1 E., Weber County, Hydrologic Unit 16020102, on left bank 3,000 ft downstream from Pineview Dam, and 5.0 mi west of Huntsville.

DRAINAGE AREA.--323 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,760 ft above sea level, from topographic map.

REMARKS.--Records fair. Flow extensively regulated by Pineview Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft<sup>3</sup>/s Dec. 18, 1991, gage height, 6.20 ft; minimum daily 4.0 ft<sup>3</sup>/s Jan. 10, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,150 ft<sup>3</sup>/s May 23, gage height, 6.06 ft; minimum daily discharge, 4.3 ft<sup>3</sup>/s Nov. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	4.3	10	10	10	8.9	55	308	80	54	150	159
2	7.1	7.4	10	10	10	8.9	75	307	84	88	180	154
3	8.6	7.4	10	10	10	8.9	43	301	262	96	205	148
4	8.4	8.0	10	9.9	10	9.0	44	336	342	60	199	161
5	9.4	7.9	10	9.9	10	9.2	52	404	372	39	203	151
6	18	9.3	10	9.9	11	9.2	40	683	438	36	208	142
7	24	6.8	10	9.9	11	9.3	35	1000	545	72	205	150
8	23	7.4	11	10	11	9.5	35	1030	622	122	186	160
9	23	10	11	10	11	9.8	54	1020	692	159	180	154
10	22	12	11	10	11	10	172	1070	680	164	168	150
11	22	12	10	10	11	11	210	1110	677	154	179	161
12	21	9.9	9.5	9.7	11	12	212	1100	623	150	183	154
13	21	13	9.5	9.8	11	12	208	1080	566	147	173	142
14	21	11	9.3	10	11	12	264	1080	490	188	188	103
15	24	6.1	9.5	10	11	8.3	272	1090	427	235	191	87
16	23	8.8	9.4	10	11	17	238	1110	358	245	182	86
17	23	9.9	9.6	10	11	48	193	1100	324	247	178	70
18	23	10	9.6	9.8	11	58	190	1080	323	230	181	48
19	23	10	9.5	9.9	11	41	194	1070	279	246	201	25
20	23	8.6	9.6	10	12	41	239	1040	238	268	202	24
21	23	6.6	9.7	10	12	41	276	1060	204	278	193	20
22	24	7.2	9.7	10	11	33	291	1100	174	277	181	21
23	24	8.7	9.7	10	8.5	36	300	966	123	228	104	17
24	25	10	9.6	10	8.3	45	308	688	89	75	107	19
25	25	9.7	9.6	10	8.3	79	307	290	73	12	195	17
26	25	9.8	9.6	10	8.4	81	310	95	66	12	228	16
27	24	10	9.7	10	8.4	69	315	95	61	10	213	20
28	23	10	9.6	10	8.7	60	308	92	60	14	200	23
29	32	10	9.9	10	---	57	295	87	60	39	186	23
30	71	10	9.9	10	---	50	299	83	56	50	160	18
31	65	---	9.8	10	---	44	---	80	---	107	164	---
TOTAL	736.7	271.8	305.3	308.8	289.6	948.0	5834	21955	9388	4102	5673	2623
MEAN	23.8	9.06	9.85	9.96	10.3	30.6	194	708	313	132	183	87.4
MAX	71	13	11	10	12	81	315	1110	692	278	228	161
MIN	7.1	4.3	9.3	9.7	8.3	8.3	35	80	56	10	104	16
AC-FT	1460	539	606	613	574	1880	11570	43550	18620	8140	11250	5200

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1993, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993
MEAN	14.1	10.0	41.5	8.74	9.73
MAX	23.8	14.4	170	14.9	15.2
(WY)	1993	1989	1992	1989	1993
MIN	8.44	7.38	6.45	6.01	6.30
(WY)	1992	1990	1991	1992	1991

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1989 - 1993

ANNUAL TOTAL	6237.8	52435.2	66.1
ANNUAL MEAN	17.0	144	144
HIGHEST ANNUAL MEAN			29.2
LOWEST ANNUAL MEAN			1110
HIGHEST DAILY MEAN	71	Oct 30	1110
LOWEST DAILY MEAN	4.0	Jan 10	4.0
ANNUAL SEVEN-DAY MINIMUM	4.2	Jan 10	4.2
ANNUAL RUNOFF (AC-FT)	12370	104000	47900
10 PERCENT EXCEEDS	31	318	199
50 PERCENT EXCEEDS	12	35	15
90 PERCENT EXCEEDS	7.0	9.5	6.8

## WEBER RIVER BASIN

239

## 10141000 WEBER RIVER NEAR PLAIN CITY, UT

LOCATION.--Lat 41°16'42", long 112°05'28", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 8, T. 6 N., R. 2 W., Weber County, Hydrologic Unit 16020102, on upstream side of right highway bridge abutment, on State Highway 40, 1 mi downstream from Fourmile Creek, 1.5 mi south of Plain City, and 6 mi upstream from mouth.

DRAINAGE AREA.--2,081 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1904 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,207.10 ft above sea level. Prior to Aug. 29, 1949, nonrecording gage at same site and datum, and Aug. 30, 1949 to June 22, 1966, water-stage recorder on right bank 50 ft upstream at same datum. Prior to Oct. 1, 1986 at datum 10.0 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Practically entire flow is diverted during summer months for irrigation above station. Flow regulated by Rockport, Echo, Lost Creek, East Canyon, and Pine View Reservoirs; also diversion above station to Willard Bay Reservoir (see stations 10129400, 10131500, 10132490, 10134000, and 10140800).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft<sup>3</sup>/s May 6, 1952, gage height, 19.01 ft; practically no flow during latter part of several summers since 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,230 ft<sup>3</sup>/s May 7, gage height, 23.13 ft; minimum daily, 50 ft<sup>3</sup>/s Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	e250	80	e60	63	106	e280	527	382	e200	77	96
2	e71	e450	71	e64	64	95	e400	483	223	e160	71	93
3	e80	e400	74	e58	66	95	e360	481	900	e144	75	90
4	e90	e270	109	e54	68	95	e330	1000	1580	e140	83	108
5	e95	e190	97	e50	64	91	e350	1260	1580	e180	88	98
6	e90	e210	113	e56	66	90	e300	1330	1830	e156	104	90
7	e70	e180	112	e60	62	98	e340	2950	2060	e123	103	92
8	e84	e160	115	e64	67	121	e318	2740	2930	e90	141	95
9	e80	e160	137	67	94	139	e304	2680	2600	e92	133	111
10	e74	e147	133	60	120	172	e310	2570	2110	e88	113	93
11	e90	e118	75	60	112	217	e306	2610	1760	e88	104	105
12	e100	e88	97	59	119	257	e300	2510	1600	e89	109	107
13	e100	e100	80	60	114	180	e288	2560	1650	e87	108	115
14	e82	e94	69	59	113	154	e300	2700	1350	81	92	136
15	e70	e64	67	67	99	286	261	2690	990	76	88	127
16	e80	e64	64	78	89	298	359	2540	1110	74	79	109
17	e74	e65	64	85	78	391	386	2550	1200	93	74	146
18	e82	85	72	84	78	715	368	2510	1370	95	69	244
19	e84	118	66	83	132	286	420	2330	1650	78	78	269
20	e90	139	62	80	205	183	353	2170	1530	72	88	188
21	e84	91	61	114	196	341	401	2050	1070	76	114	158
22	e82	83	62	97	166	171	439	2200	1040	103	152	149
23	e80	117	60	103	148	192	493	2230	1090	178	161	146
24	e90	150	61	108	217	228	577	1890	866	629	145	163
25	e86	81	58	101	213	461	603	1730	679	272	119	171
26	e84	80	55	99	193	551	548	1310	460	197	119	160
27	e88	79	56	87	118	445	563	1180	276	216	131	131
28	e90	83	e60	68	110	337	586	1180	236	163	131	119
29	e250	86	e80	65	---	296	575	1160	234	121	136	119
30	e350	84	e58	71	---	e310	521	932	e229	103	108	135
31	e250	---	e56	67	---	e292	---	472	---	88	92	---
TOTAL	3178	4286	2424	2288	3234	7693	11939	57525	36585	4352	3285	3963
MEAN	103	143	78.2	73.8	115	248	398	1856	1219	140	106	132
MAX	350	450	137	114	217	715	603	2950	2930	629	161	269
MIN	58	64	55	50	62	90	261	472	223	72	69	90
AC-FT	6300	8500	4810	4540	6410	15260	23680	114100	72570	8630	6520	7860

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1993, BY WATER YEAR (WY)

	322	309	349	378	429	720	1083	1368	829	142	103	214
MEAN	322	309	349	378	429	720	1083	1368	829	142	103	214
MAX	968	748	1884	1691	2399	3502	3639	4111	4233	661	414	968
(WY)	1985	1983	1984	1984	1986	1986	1986	1984	1983	1975	1983	1983
MIN	27.4	45.2	41.8	35.4	40.8	44.5	59.7	44.7	36.9	28.0	32.7	57.9
(WY)	1989	1989	1989	1989	1989	1977	1988	1988	1988	1988	1988	1966

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1966 - 1993

ANNUAL TOTAL	38734	140752	520	1986
ANNUAL MEAN	106	386	1427	1988
HIGHEST ANNUAL MEAN			65.3	
LOWEST ANNUAL MEAN			7060	Jun 3 1983
HIGHEST DAILY MEAN	450	2950	10	May 25 1966
LOWEST DAILY MEAN	38	50	19	Jul 3 1966
ANNUAL SEVEN-DAY MINIMUM	57	57		
ANNUAL RUNOFF (AC-FT)	76830	279200	377000	
10 PERCENT EXCEEDS	151	1220	1470	
50 PERCENT EXCEEDS	94	118	191	
90 PERCENT EXCEEDS	63	66	58	

e Estimated

## WEBER RIVER BASIN

10141000 WEBER RIVER NEAR PLAIN CITY, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to September 1981.

WATER TEMPERATURES: October 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,130 microsiemens May 16, 1977; minimum, 120 microsiemens November 11, 1978.

WATER TEMPERATURES: Maximum, 28.5°C June 25, 26, 1977; minimum, 0.0°C Dec. 31, 1978, Jan. 1, 1979, Jan. 1, 1980.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BAROMETRIC PRESSURE (MM HG)	COLIFORM, FECA, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, FECA, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CaCO3)
NOV, 1992												
17...	1200	63	1110	8.0	8.0	10.0	4.1	7.8	653	22	79	290
FEB, 1993												
02...	1130	61	1140	8.1	1.5	5.0	3.0	11.0	658	K15	68	330
MAY												
25...	1245	1980	380	8.2	27.5	13.5	38	8.5	653	160	200	160
SEP												
07...	1300	100	595	8.1	28.0	19.0	5.8	6.9	657	120	99	220

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	CARBONATE WATER DIS IT (MG/L AS CO3)	BICARBONATE WATER DIS IT (MG/L AS HCO3)	ALKALINITY WAT DIS TOT IT (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)
NOV, 1992												
17...	71	28	87	38	2	10	0	321	262	41	120	0.30
FEB, 1993												
02...	80	32	100	39	2	11	0	377	309	47	160	0.20
MAY												
25...	45	11	14	16	0.5	2.2	0	165	135	19	22	0.10
SEP												
07...	60	17	38	27	1	4.3	0	227	186	23	52	0.20

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
NOV, 1992												
17...	13	564	550	0.77	96.2	3.42	3.43	0.280	0.270	3.70	3.70	0.600
FEB, 1993												
02...	14	630	646	0.86	103	2.12	2.12	--	0.280	--	2.40	--
MAY												
25...	8.8	214	205	0.29	1140	0.310	0.310	--	0.010	--	0.320	--
SEP												
07...	8.7	327	318	0.44	88.0	0.480	0.480	--	0.030	--	0.510	--

DATE	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
NOV, 1992											
17...	0.590	0.76	1.1	1.7	5.4	24	1.50	1.30	1.30	1.30	4.0
FEB, 1993											
02...	1.60	2.1	1.2	2.8	5.2	--	1.40	1.20	--	1.10	3.4
MAY											
25...	0.070	0.09	0.83	0.90	1.2	--	0.230	0.030	--	0.030	0.09
SEP											
07...	0.150	0.19	0.25	0.40	0.91	--	0.190	0.180	--	0.160	0.49

K Results based on colony count outside acceptable range (non-ideal colony count).

WEBER RIVER BASIN

241

10141000 WEBER RIVER NEAR PLAIN CITY, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BAR- IUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV , 1992							
17...	1200	<10	110	<3	21	62	62
FEB , 1993							
02...	1130	<10	110	<3	26	78	100
MAY							
25...	1245	30	78	<3	30	8	13
SEP							
07...	1300	<10	94	<3	8	35	69

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV , 1992						
17...	<10	3	<1	<1.0	360	<6
FEB , 1993						
02...	<10	8	<1	<1.0	400	<6
MAY						
25...	<10	<1	<1	<1.0	170	<6
SEP						
07...	<10	2	<1	<1.0	240	<6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN 062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV , 1992						
17...	1200	63	10.0	--	15	2.6
FEB , 1993						
02...	1130	61	5.0	--	9	1.5
02...	1140	61	4.5	--	8	1.3
02...	1143	61	5.0	--	8	1.4
02...	1147	61	5.0	--	8	1.3
02...	1157	61	5.0	--	9	1.5
MAY						
25...	1245	1980	13.5	80	161	861
SEP						
07...	1300	100	19.0	--	21	5.7



## JORDAN RIVER BASIN

10146400 CURRANT CREEK NEAR MONA, UT

LOCATION.--Lat 39°48'09", long 111°51'44", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, sec. 6, T. 12 S., R. 1 E., Juab County, Hydrologic Unit 16020201, on left bank 40 ft upstream from bridge crossing, 800 ft downstream from Burrington ponds, 0.5 mi upstream from Mona Reservoir, 1 mi southwest of Mona.

DRAINAGE AREA.--225 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1978 to current year.

REVISED RECORDS.--WDR UT-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,890 ft above sea level, from topographic map. Prior to June 10, 1985, at same site, different datum. Prior to October 1, 1992, at same site, different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 595 ft<sup>3</sup>/s May 14, 1984, gage height, 6.30 ft; maximum gage height, 6.77 ft, May 31, 1983, site and datum then in use; minimum, 1.5 ft<sup>3</sup>/s Nov. 4, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 157 ft<sup>3</sup>/s Mar. 11, gage height, 5.97 ft; minimum daily discharge, 1.5 ft<sup>3</sup>/s Nov. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	8.0	6.5	6.8	9.4	e18	17	7.6	9.0	7.1	6.8	6.5
2	4.3	8.8	6.6	6.9	e9.3	e17	21	7.6	8.1	7.0	6.8	6.5
3	4.3	7.2	6.8	6.8	e9.4	e15	20	8.3	10	6.8	6.8	6.5
4	4.8	1.5	6.8	6.8	e9.5	16	16	15	11	6.8	6.7	6.5
5	4.7	1.6	6.8	6.8	e9.6	17	18	16	11	7.0	7.0	6.5
6	4.9	1.6	6.8	6.8	e9.6	21	15	20	11	6.8	7.2	6.6
7	4.8	1.8	6.6	6.8	e9.8	30	13	19	11	6.8	7.0	6.4
8	4.7	1.8	6.5	7.2	10	37	12	14	12	6.7	7.3	6.0
9	4.9	2.0	6.5	6.8	12	48	11	12	10	6.2	6.8	6.1
10	4.8	2.0	6.7	7.6	13	66	10	10	9.2	6.2	7.1	6.1
11	4.5	2.9	7.0	8.1	15	95	9.7	8.8	8.9	6.6	7.3	6.1
12	4.5	4.8	7.2	8.1	17	65	10	7.2	8.8	6.4	7.2	6.1
13	4.6	5.5	6.5	8.1	16	44	11	6.5	8.5	6.5	7.1	6.1
14	4.5	5.7	6.5	8.3	15	46	10	6.4	8.4	6.5	6.8	6.1
15	4.4	5.8	6.5	9.2	14	67	10	11	8.3	6.3	6.7	6.2
16	4.4	5.5	6.5	10	14	43	10	25	8.2	5.9	6.7	7.0
17	4.4	6.0	6.5	11	13	29	9.7	54	9.2	6.0	6.4	7.2
18	4.6	6.0	6.6	11	13	85	9.1	55	9.9	6.2	8.3	7.3
19	4.7	6.2	6.8	12	23	48	8.9	32	9.3	6.4	7.4	7.0
20	4.4	6.6	e6.6	12	38	23	8.7	33	8.8	6.5	7.0	6.8
21	4.4	6.6	e6.4	12	30	17	8.7	36	8.2	6.4	6.9	6.8
22	4.8	6.5	e6.3	12	32	15	8.7	40	7.6	6.4	6.9	6.8
23	5.0	6.8	e6.5	12	29	14	7.6	36	7.2	6.7	6.7	6.8
24	5.1	6.5	e6.6	11	28	13	7.4	26	7.3	7.1	6.6	6.8
25	5.0	6.5	e6.5	9.9	24	12	8.2	15	7.0	7.1	6.7	6.7
26	5.2	6.5	e6.4	e9.5	22	12	8.4	11	7.1	7.0	6.8	6.6
27	5.2	6.5	e6.4	e9.0	20	17	8.5	12	7.0	6.8	6.7	6.7
28	9.9	6.5	e6.5	e8.8	19	27	8.6	17	6.6	6.8	6.5	6.8
29	22	6.5	7.0	e9.1	---	66	8.5	16	6.5	6.8	6.5	6.8
30	24	6.5	7.2	e9.4	---	38	8.0	12	6.7	7.2	6.5	6.8
31	12	---	6.8	e9.4	---	22	---	10	---	7.1	6.5	---
TOTAL	194.2	156.7	205.9	279.2	483.6	1083	332.7	599.4	261.8	206.1	213.7	197.2
MEAN	6.26	5.22	6.64	9.01	17.3	34.9	11.1	19.3	8.73	6.65	6.89	6.57
MAX	24	8.8	7.2	12	38	95	21	55	12	7.2	8.3	7.3
MIN	4.3	1.5	6.3	6.8	9.3	12	7.4	6.4	6.5	5.9	6.4	6.0
AC-FT	385	311	408	554	959	2150	660	1190	519	409	424	391

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1993, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	23.3	29.4	30.4	30.7	44.2	59.8	60.0	65.4	36.7	14.7	12.8	15.2			
MAX	71.7	75.4	85.4	65.5	104	172	191	319	245	50.4	41.5	41.5			
(WY)	1985	1984	1984	1986	1986	1985	1985	1984	1983	1983	1984	1984			
MIN	6.26	5.22	6.64	9.01	15.1	14.3	9.25	6.16	4.92	4.24	2.98	3.60			
(WY)	1993	1993	1993	1993	1992	1992	1992	1992	1992	1992	1992	1992			

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1979 - 1993

ANNUAL TOTAL	2680.8	4213.5	35.1	
ANNUAL MEAN	7.32	11.5	101	1984
HIGHEST ANNUAL MEAN			7.87	1992
LOWEST ANNUAL MEAN			566	May 14 1984
HIGHEST DAILY MEAN	28	Mar 5	1.5	Nov 4 1992
LOWEST DAILY MEAN	1.5	Nov 4	1.8	Nov 4 1992
ANNUAL SEVEN-DAY MINIMUM	1.8	Nov 4	1.5	Nov 4 1992
ANNUAL RUNOFF (AC-FT)	5320	8360	25460	
10 PERCENT EXCEEDS	13	22	82	
50 PERCENT EXCEEDS	6.3	7.2	17	
90 PERCENT EXCEEDS	3.1	5.4	6.8	

e Estimated

## JORDAN RIVER BASIN

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10148200 TIE FORK NEAR SOLDIER SUMMIT, UT

LOCATION.--39°57'00", long 111°12'58", in NE¼, NE¼, SW¼, sec. 14, T. 10 S., R. 6 E., Utah County, Hydrologic Unit 16020202, on right bank 230 ft upstream from mouth and U.S. Highway 6-50, 250 ft downstream from Denver & Rio Grande Western Railroad, 7.4 mi west of Soldier Summit, and 15.2 mi east of Thistle.

DRAINAGE AREA.--19.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder and artificial control. Elevation of gage is 6,120 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,200 ft<sup>3</sup>/s Aug. 21, 1983, result of instantaneous removal of upstream blockage, gage height, about 7.85 ft from high-water mark, from rating curve extended above 26 ft<sup>3</sup>/s on basis of slope-area measurement; minimum, 0.15 ft<sup>3</sup>/s Aug. 19, 20, 1983, result of temporary blockage upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 15	--	*28	maximum daily	No other peak greater than base discharge.			
Minimum daily, .57 ft <sup>3</sup> /s Jan. 23.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	1.2	.97	.86	.78	1.7	5.3	10	18	10	6.5	4.3
2	.79	1.6	1.0	.82	.79	e1.5	5.5	e11	18	10	6.4	4.2
3	.80	1.3	.98	.74	.78	e1.3	5.6	e13	18	9.9	6.4	4.2
4	.79	1.2	e.96	.63	.95	e1.4	5.7	e15	17	9.9	6.3	4.2
5	.81	1.3	e1.0	.67	e.91	e1.5	5.9	e14	e16	9.7	6.3	4.3
6	.80	1.3	1.0	.79	.92	1.5	6.2	e13	e16	9.4	6.3	4.2
7	.83	1.3	e1.0	.85	.95	1.5	6.3	e13	e16	9.3	6.3	4.2
8	.85	1.3	1.0	.80	.97	1.6	6.3	e12	e15	9.1	6.8	4.2
9	.85	1.3	1.0	.72	1.1	1.6	6.3	e11	e15	8.9	6.4	4.2
10	.85	1.3	.97	.67	1.1	1.7	6.6	e10	e14	8.8	6.3	4.2
11	.85	e1.2	1.0	.66	1.1	1.7	7.2	e12	e14	8.8	6.2	4.0
12	.89	e1.3	1.0	.58	1.1	1.7	7.6	e14	e14	8.7	6.0	3.9
13	.88	1.3	.89	.64	e1.0	1.8	8.0	e16	e13	8.7	5.8	3.9
14	.88	1.3	.83	.66	e.97	1.9	8.4	e17	e13	8.5	5.6	4.0
15	.89	1.3	1.0	.65	e.95	2.4	8.5	e20	e12	8.3	5.4	3.8
16	.92	1.3	.90	.65	e1.2	2.5	8.5	e22	e12	8.2	5.3	4.1
17	.92	1.2	.95	.65	1.4	2.9	8.5	e26	e14	8.1	5.3	4.2
18	.93	1.3	e.92	.63	1.4	3.1	9.1	e28	13	8.0	5.3	4.1
19	.92	1.3	.89	.64	1.5	3.1	9.2	e27	12	7.9	5.3	4.0
20	.97	1.2	.83	.65	1.4	3.3	9.4	e27	12	7.8	5.5	3.9
21	.98	1.2	.96	.67	e1.4	3.4	9.6	e26	12	7.7	5.4	3.8
22	.97	1.1	.98	.67	1.4	3.4	9.9	e25	12	7.7	5.2	3.7
23	.96	e1.0	.95	.57	1.5	3.5	10	e24	12	7.9	5.1	3.7
24	.96	e.96	.90	.60	1.5	3.8	9.9	e22	12	7.9	4.9	3.7
25	1.0	e.86	.85	.70	e1.5	3.9	10	e21	11	7.3	4.9	3.7
26	1.0	e.90	.86	.78	e1.5	4.3	10	21	11	7.1	4.9	3.7
27	1.1	.92	.87	.73	1.7	4.7	10	21	11	7.0	4.8	3.7
28	1.3	e.94	.98	.83	1.7	4.7	9.7	21	11	6.9	4.8	3.7
29	1.2	.95	.90	e.80	---	4.8	9.8	20	11	6.9	4.7	3.6
30	1.3	e.96	.84	.76	---	5.0	10	20	10	6.8	4.7	3.6
31	1.3	---	.73	.79	---	5.3	---	20	---	6.6	4.5	---
TOTAL	29.27	35.59	28.91	21.86	33.47	86.5	243.0	572	405	257.8	173.6	119.0
MEAN	.94	1.19	.93	.71	1.20	2.79	8.10	18.5	13.5	8.32	5.60	3.97
MAX	1.3	1.6	1.0	.86	1.7	5.3	10	28	18	10	6.8	4.3
MIN	.78	.86	.73	.57	.78	1.3	5.3	10	10	6.6	4.5	3.6
AC-FT	58	71	57	43	66	172	482	1130	803	511	344	236

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1993, BY WATER YEAR (WY)

	3.32	3.05	2.70	2.56	2.73	3.75	7.76	15.3	10.9	7.03	4.94	3.79
MEAN	3.32	3.05	2.70	2.56	2.73	3.75	7.76	15.3	10.9	7.03	4.94	3.79
MAX	6.32	5.19	4.64	4.09	4.47	10.4	27.5	53.7	43.3	21.3	11.8	7.99
(WY)	1984	1985	1984	1984	1984	1986	1985	1984	1983	1983	1983	1984
MIN	.73	.96	.93	.71	1.20	1.70	1.83	1.80	1.57	1.23	.72	.70
(WY)	1978	1978	1993	1993	1993	1991	1992	1992	1977	1992	1992	1992

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1964 - 1993

ANNUAL TOTAL	511.64	2006.00	
ANNUAL MEAN	1.40	5.50	
HIGHEST ANNUAL MEAN			5.66
LOWEST ANNUAL MEAN			14.1
HIGHEST DAILY MEAN	2.1 Jan 4	28 May 18	1.66 1992
LOWEST DAILY MEAN	.62 Aug 3	.57 Jan 23	84 May 31 1983
ANNUAL SEVEN-DAY MINIMUM	.66 Sep 12	.63 Jan 18	.20 Aug 20 1983
ANNUAL RUNOFF (AC-FT)	1010	3980	.63 Jan 18 1993
10 PERCENT EXCEEDS	1.9	13	4100
50 PERCENT EXCEEDS	1.6	3.7	12
90 PERCENT EXCEEDS	.72	.81	3.6
			1.9

e Estimated

## JORDAN RIVER BASIN

10149500 DIAMOND FORK BELOW RED HOLLOW, NEAR THISTLE, UT

LOCATION.--Lat 40°04'43", long 111°24'32", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 32, T. 8 S., R. 5 E., Utah County, on right bank 0.5 mi downstream from Red Hollow, 7.0 mi upstream from mouth, and 8 mi northeast of Thistle.

DRAINAGE AREA.--107 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1953 to June 1969, December 1988 to current year. Records for October and November, 1988 provided by Bureau of Reclamation.

GAGE.--Water-stage recorder. Elevation of gage is 5,260 ft above sea level, from topographic map. Prior to Dec. 8, 1988 at site approximately 0.2 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow includes water diverted from Strawberry Reservoir (capacity, 1,106,500 acre-ft) since June 30, 1973, in Colorado River basin via Strawberry tunnel for irrigation in vicinity of Spanish Fork.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft<sup>3</sup>/s July 13, 1954, gage height, 4.71 ft; minimum, 1.5 ft<sup>3</sup>/s Dec. 5, 1959, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 498 ft<sup>3</sup>/s July 2, 5, gage height 3.09 ft; minimum daily discharge 12 ft<sup>3</sup>/s many days in October.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	14	90	121	121	122	199	144	123	477	386	391
2	14	43	118	122	121	122	289	150	119	485	405	336
3	13	79	117	e122	121	123	330	162	115	483	434	312
4	12	77	116	e120	122	122	335	197	107	464	467	279
5	12	77	119	e120	125	122	346	172	104	461	468	264
6	12	77	120	e120	120	122	340	163	101	464	463	212
7	12	77	123	e122	121	123	337	180	97	430	468	192
8	12	77	120	121	120	124	341	157	91	399	464	197
9	12	77	121	120	121	126	347	145	86	428	439	197
10	12	77	120	122	122	128	352	150	82	399	393	208
11	12	76	120	122	122	128	355	184	80	366	324	233
12	12	77	121	128	122	127	351	229	116	368	258	197
13	12	77	120	122	122	127	346	259	115	386	241	181
14	12	77	125	122	121	129	343	280	134	422	284	195
15	12	77	e120	122	122	133	236	289	198	394	281	147
16	12	77	e120	122	121	132	73	302	269	387	311	142
17	12	77	e120	121	122	138	77	311	300	379	335	147
18	12	77	e123	121	121	149	89	300	249	377	356	114
19	12	77	e125	120	123	142	81	288	236	356	383	96
20	12	78	e128	120	124	140	77	287	202	339	355	93
21	12	77	127	120	122	140	80	287	193	331	423	75
22	12	78	130	121	122	140	95	276	168	345	428	60
23	12	78	127	120	123	143	112	247	215	331	423	42
24	12	77	134	126	122	109	112	231	283	309	440	57
25	14	e80	130	120	122	56	108	220	338	254	434	65
26	13	e78	134	120	127	67	117	200	347	229	438	63
27	12	e76	138	126	122	73	131	190	360	190	443	63
28	16	e78	121	126	122	71	144	165	383	224	397	104
29	13	77	120	124	---	101	151	149	436	313	340	97
30	20	78	121	121	---	161	148	139	453	343	376	104
31	19	---	124	120	---	159	---	130	---	359	415	---
TOTAL	428	2222	3792	3774	3416	3799	6442	6583	6100	11492	12072	4863
MEAN	13.8	74.1	122	122	122	123	215	212	203	371	389	162
MAX	42	80	138	128	127	161	355	311	453	485	468	391
MIN	12	14	90	120	120	56	73	130	80	190	241	42
AC-FT	849	4410	7520	7490	6780	7540	12780	13060	12100	22790	23940	9650

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1993, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993
MEAN	25.5	53.3	93.8	104	104
MAX	49.5	97.7	122	122	123
(WY)	1989	1990	1993	1993	1992
MIN	13.5	14.7	41.7	92.8	90.6
(WY)	1992	1989	1989	1991	1989

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1989 - 1993

ANNUAL TOTAL	71955	64983	170
ANNUAL MEAN	197	178	194
HIGHEST ANNUAL MEAN			137
LOWEST ANNUAL MEAN			492
HIGHEST DAILY MEAN	473	Jun 4	485
LOWEST DAILY MEAN	12	Oct 4	12
ANNUAL SEVEN-DAY MINIMUM	12	Oct 4	12
ANNUAL RUNOFF (AC-FT)	142700	128900	122900
10 PERCENT EXCEEDS	408	384	398
50 PERCENT EXCEEDS	140	124	112
90 PERCENT EXCEEDS	49	59	15

e Estimated

## JORDAN RIVER BASIN

245

## 10150500 SPANISH FORK AT CASTILLA, UT

LOCATION.--Lat 40°02'59", long 111°32'50", in SE1/4, NE1/4, NW1/4, sec. 12, T. 9 S., R. 3 E., Utah County, Hydrologic Unit 16020202, on right bank 600 ft upstream from outlet of Cold Springs, 0.9 mi upstream from diversion dam of Bureau of Reclamation, 1.5 mi northwest of Castilla, and 2.8 mi downstream from Diamond Fork.

DRAINAGE AREA.--652 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1889 to December 1890, April 1903 to November 1917, May 1919 to September 1925, January 1933 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Spanish Fork" 1889-90, 1903-08.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,870 ft above sea level, from topographic map. Prior to May 3, 1919, nonrecording gages at various sites 1.5 mi to 2.5 mi downstream from present site at different datums below power canal, which began diverting late in 1908. May 3, 1919, to Apr. 14, 1920, nonrecording gage, Apr. 15, 1920, to Sept. 30, 1925, and Jan. 1, 1933, to Apr. 16, 1940, water-stage recorder, at present site upstream from power canal at datum 2.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Several small diversions for irrigation above station. Flow since June 1915 includes water diverted from Strawberry Reservoir, capacity, 1,106,500 acre-ft since June 30, 1973, in Colorado River Basin via Strawberry Tunnel for irrigation in vicinity of Spanish Fork. Flow affected by mudslide and draining of resultant lake about 5 mi upstream Apr. 14 to Sept. 30, 1983.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft<sup>3</sup>/s May 15, 1984, gage height, 11.53 ft; minimum, 5.8 ft<sup>3</sup>/s Dec. 18, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,250 ft<sup>3</sup>/s May 22, gage-height, 6.34 ft.; minimum daily discharge, 42 ft<sup>3</sup>/s Oct. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	56	114	158	165	175	372	385	547	617	431	416
2	66	91	145	163	166	172	510	406	506	611	463	378
3	60	120	148	157	165	173	513	454	487	610	490	357
4	56	111	146	143	166	175	513	600	458	609	528	332
5	55	112	145	145	155	177	589	530	430	612	535	321
6	51	112	149	155	163	179	527	493	409	593	546	282
7	52	113	147	164	167	182	496	575	398	559	548	256
8	52	114	149	169	164	187	486	515	377	536	567	259
9	47	113	152	166	170	187	505	443	331	545	547	264
10	45	111	153	e160	169	188	525	438	311	524	478	273
11	44	107	153	e156	173	204	531	522	291	482	419	290
12	43	106	158	157	174	195	525	644	319	465	349	269
13	44	111	151	159	164	191	507	743	318	491	326	254
14	43	113	145	162	156	194	497	1050	342	521	352	263
15	43	114	148	164	156	219	418	1070	405	480	357	232
16	44	113	146	163	164	225	205	1100	462	468	372	225
17	45	113	149	166	169	241	209	1140	536	468	388	231
18	45	113	152	164	163	364	254	1120	463	469	405	205
19	44	100	144	166	178	383	232	1110	426	448	424	178
20	43	99	136	164	191	361	219	1110	381	422	418	168
21	42	114	143	164	177	367	224	1170	370	406	456	146
22	42	114	151	169	176	353	258	1160	346	417	457	123
23	44	114	156	164	173	351	309	1070	369	408	456	99
24	43	111	151	159	178	356	315	999	425	394	463	102
25	45	104	147	157	175	277	290	923	492	343	457	119
26	45	100	145	156	166	327	306	868	511	316	454	116
27	43	105	146	155	171	348	349	834	517	288	456	116
28	51	114	159	154	174	336	388	772	534	303	431	155
29	50	107	160	157	---	342	406	705	588	364	388	158
30	53	108	166	159	---	413	402	649	608	402	411	162
31	64	---	151	160	---	346	---	593	---	408	434	---
TOTAL	1595	3233	4605	4955	4728	8188	11880	24191	12957	14579	13806	6749
MEAN	51.5	108	149	160	169	264	396	780	432	470	445	225
MAX	151	120	166	169	191	413	589	1170	608	617	567	416
MIN	42	56	114	143	155	172	205	385	291	288	326	99
AC-FT	3160	6410	9130	9830	9380	16240	23560	47980	25700	28920	27380	13390

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920-25, 1934-93, BY WATER YEAR (WY)

	MEAN	111	86.1	79.1	79.8	92.9	132	271	546	460	397	323	199
MAX	1654	480	209	165	264	334	1054	2077	1593	565	525	385	
(WY)	1984	1984	1984	1990	1986	1986	1952	1984	1983	1922	1985	1992	
MIN	33.5	42.7	40.5	45.4	41.9	53.0	56.7	180	126	101	92.4	59.7	
(WY)	1935	1962	1961	1961	1964	1964	1961	1934	1934	1934	1934	1934	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1920-25, 1934-93

ANNUAL TOTAL	88405	111466											
ANNUAL MEAN	242	305											
HIGHEST ANNUAL MEAN			233										
LOWEST ANNUAL MEAN			569										
HIGHEST DAILY MEAN			86.2										1984
LOWEST DAILY MEAN													1934
ANNUAL SEVEN-DAY MINIMUM				524	Jun 12	1170	May 21	3700					1984
ANNUAL RUNOFF (AC-FT)				42	Oct 21	42	Oct 21	20					1951
10 PERCENT EXCEEDS				43	Oct 18	43	Oct 18	27					1934
50 PERCENT EXCEEDS				175400		221100		168700					
90 PERCENT EXCEEDS				451		546		506					
				167		224		147					
				100		101		59					

e Estimated

## JORDAN RIVER BASIN

10153800 NORTH FORK PROVO RIVER NEAR KAMAS, UT

LOCATION.--Lat 40°35'48", long 111°05'48", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, sec. 36, T. 2 S., R. 7 E., Summit County, Hydrologic Unit 16020203, on right bank 500 ft upstream from bridge on State Highway 150, 1,500 ft upstream from mouth, and 9.5 mi southeast of Kamas.

DRAINAGE AREA.--24.4 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,480 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Slight regulation from several small reservoirs at headwaters used for storing water for release during the summer and fall. No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 728 ft<sup>3</sup>/s June 5, 1986, gage height, 2.98 ft; minimum recorded, 1.9 ft<sup>3</sup>/s several days during winter of 1964-65.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	2300	*615	*2.74	June 14	2000	386	2.32

Minimum daily discharge, 2.2 ft<sup>3</sup>/s Oct. 2, 14, 16, 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	5.1	e4.1	e4.3	e5.4	e7.0	18	48	367	166	43	8.5
2	2.2	e4.7	e4.4	e4.4	e5.2	e7.0	20	52	350	162	42	8.0
3	2.3	e4.5	e4.3	e4.0	e5.0	e6.8	20	63	299	156	40	7.4
4	2.4	e4.2	e3.7	e3.8	e4.6	e6.2	18	84	232	127	40	6.9
5	2.5	e4.7	e4.1	e4.2	e4.6	e6.4	16	66	202	104	39	6.8
6	2.4	5.0	e4.0	e4.5	e5.8	e6.6	14	58	188	93	39	6.0
7	2.5	4.7	e4.3	e4.6	e6.0	e7.6	15	53	173	89	36	5.3
8	2.5	4.7	e4.4	e4.6	e6.4	e7.4	15	46	161	84	39	4.8
9	2.3	4.7	e4.4	e4.7	e6.2	e7.6	15	43	157	79	36	4.5
10	2.4	e3.8	e4.8	e4.7	e6.2	e7.8	17	49	178	75	35	4.3
11	2.4	e3.5	e5.0	e4.7	e6.4	e7.6	18	69	217	72	34	4.0
12	2.3	e3.1	e4.9	e3.5	e6.4	e7.0	18	97	266	69	30	3.9
13	2.3	e3.7	e4.0	e5.4	e6.0	e7.6	17	138	280	65	27	3.9
14	2.2	4.7	e3.4	e5.2	e5.2	e8.0	19	177	312	61	25	4.0
15	2.3	4.6	e4.4	e5.0	e5.0	e8.2	19	219	329	57	24	3.9
16	2.2	4.7	e3.5	e5.2	e5.2	e8.0	19	273	323	68	22	5.0
17	2.3	4.5	e3.6	e5.0	e5.6	e8.2	21	297	299	63	20	6.5
18	2.3	4.4	e3.8	e5.0	e6.0	e8.2	24	319	241	57	19	6.5
19	2.3	4.3	e3.7	e5.0	e7.0	e7.9	22	351	253	55	18	5.9
20	2.2	4.6	e3.6	e4.9	e6.6	e7.9	22	361	286	53	17	5.0
21	2.3	4.2	e3.9	e5.2	e5.8	e7.9	25	396	289	51	17	4.4
22	2.9	e3.9	e3.9	e5.2	e6.8	e8.0	32	473	294	51	15	4.2
23	2.7	e4.1	e3.8	e4.0	e6.6	e8.5	36	370	259	79	14	4.0
24	2.5	e3.8	e3.7	e4.5	e7.2	e8.0	34	387	207	80	12	4.0
25	3.9	e3.7	e3.6	e5.0	e6.4	9.8	32	459	197	64	12	3.9
26	3.9	e3.8	e3.8	e5.0	e5.2	15	37	500	222	74	12	3.8
27	3.1	e4.1	e4.1	e5.0	e5.2	21	45	447	226	65	11	3.7
28	4.1	e4.0	e4.1	e4.7	e7.4	22	50	401	220	58	10	3.5
29	4.6	e3.9	e4.2	e4.9	---	20	54	331	199	54	9.7	3.4
30	7.4	e3.7	e4.2	e4.5	---	18	51	363	179	51	9.3	3.3
31	6.2	---	e4.0	e5.4	---	18	---	371	---	47	8.9	---
TOTAL	90.2	127.4	125.7	145.8	165.4	306.2	763	7361	7405	2429	755.9	149.3
MEAN	2.91	4.25	4.05	4.70	5.91	9.88	25.4	237	247	78.4	24.4	4.98
MAX	7.4	5.1	5.0	5.4	7.4	22	54	500	367	166	43	8.5
MIN	2.2	3.1	3.4	3.5	4.6	6.2	14	43	157	47	8.9	3.3
AC-FT	179	253	249	289	328	607	1510	14600	14690	4820	1500	296

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1993, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	8.48	7.33	6.75	6.01	5.92	8.59	33.2	140	171	54.0	20.3	8.93																		
MAX	37.0	17.1	15.6	10.1	11.5	29.8	78.4	237	345	169	48.0	27.9																		
(WY)	1983	1983	1983	1986	1986	1986	1985	1993	1986	1975	1983	1983																		
MIN	2.91	2.87	2.74	2.45	2.00	2.00	6.85	31.6	27.3	7.88	3.47	2.78																		
(WY)	1993	1977	1977	1977	1977	1977	1975	1977	1992	1992	1992	1992																		

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1964 - 1993

ANNUAL TOTAL	5813.1	19823.9	
ANNUAL MEAN	15.9	54.3	
HIGHEST ANNUAL MEAN			39.3
LOWEST ANNUAL MEAN			68.9
HIGHEST DAILY MEAN	114	500	11.4
LOWEST DAILY MEAN	2.2	2.2	1977
ANNUAL SEVEN-DAY MINIMUM	2.3	2.3	1986
ANNUAL RUNOFF (AC-FT)	11530	39320	539
10 PERCENT EXCEEDS	47	218	2.0
50 PERCENT EXCEEDS	4.8	7.2	2.0
90 PERCENT EXCEEDS	2.7	3.7	4.1

e Estimated

## JORDAN RIVER BASIN

247

10154200 PROVO RIVER NEAR WOODLAND, UT

LOCATION.--Lat 40°33'28", long 111°10'05", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 17, T. 3 S., R. 7 E., Summit County, Hydrologic Unit 16020203, on right bank on south side of State Highway 35, 0.3 mi downstream from Twin Pine Bridge, 1.6 mi downstream from South Fork and 3.5 mi southeast of Woodland.

DRAINAGE AREA.--162 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1963 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,950 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Records include flow of Duchesne Tunnel, transmountain diversion. Flow also affected by some small irrigation diversions above station and by storage in several small reservoirs at headwaters. Information on these diversions is available from the Provo River Water Commissioner's Report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,040 ft<sup>3</sup>/s June 7, 1986, from rating curve extended above 2,000 ft<sup>3</sup>/s on the basis of slope-area measurement of peak flow, gage height, 7.40 ft; minimum, 18 ft<sup>3</sup>/s Nov. 11, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,780 ft<sup>3</sup>/s May 22, gage height, 6.43 ft; minimum, 18 ft<sup>3</sup>/s Nov. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	51	42	48	48	49	128	331	2080	776	218	133
2	43	53	42	48	46	48	141	359	1850	738	208	115
3	46	48	40	44	43	45	126	427	1420	721	191	118
4	46	42	33	43	41	47	129	585	1150	627	145	128
5	42	53	36	45	43	51	133	485	1110	559	143	135
6	48	45	40	47	47	57	119	443	1080	500	141	136
7	48	47	39	47	47	55	110	426	983	444	133	131
8	48	48	41	48	45	59	111	362	887	415	150	135
9	48	45	41	48	46	63	126	327	851	363	147	131
10	46	34	42	47	46	63	135	359	961	347	136	125
11	44	31	46	48	46	62	140	483	1150	330	136	113
12	43	43	46	40	45	53	139	635	1270	314	127	114
13	44	48	43	48	38	58	131	848	1360	313	120	115
14	43	43	36	53	35	61	129	1090	1350	285	e125	115
15	42	43	45	49	37	63	135	1270	1240	248	e129	116
16	42	43	39	48	43	62	137	1500	1230	252	e133	118
17	42	42	43	48	47	65	143	1590	1210	264	e136	121
18	42	42	45	50	46	72	179	1700	1060	262	e140	122
19	41	42	44	49	48	71	159	1850	1050	259	145	120
20	44	42	43	47	47	73	152	1930	1120	253	146	117
21	45	38	44	48	45	74	169	2100	1140	233	157	111
22	48	38	43	47	47	76	213	2480	1110	235	154	110
23	47	35	43	39	50	88	260	2150	1040	336	135	109
24	45	40	41	44	48	107	254	2200	966	467	125	110
25	42	35	39	48	48	130	227	2130	1000	341	131	113
26	40	36	41	48	42	160	258	1900	999	366	137	69
27	35	40	41	45	47	181	316	1880	1020	347	136	63
28	39	43	42	43	51	179	354	1640	1000	294	132	63
29	45	42	43	46	---	156	378	1510	955	259	151	76
30	68	38	43	41	---	137	365	1790	865	247	152	63
31	61	---	41	49	---	123	---	2070	---	231	131	---
TOTAL	1401	1270	1287	1443	1262	2588	5496	38850	34507	11626	4490	3345
MEAN	45.2	42.3	41.5	46.5	45.1	83.5	183	1253	1150	375	145	111
MAX	68	53	46	53	51	181	378	2480	2080	776	218	136
MIN	35	31	33	39	35	45	110	327	851	231	120	63
AC-FT	2780	2520	2550	2860	2500	5130	10900	77060	68440	23060	8910	6630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1993, BY WATER YEAR (WY)

	MEAN	71.7	66.0	60.9	58.9	57.8	72.0	193	772	793	252	121	83.1
MAX	155	97.9	97.3	86.9	95.7	198	370	1253	1505	658	255	166	
(WY)	1983	1983	1984	1984	1986	1986	1985	1993	1986	1965	1965	1982	
MIN	41.3	42.3	38.4	36.6	40.1	41.5	69.4	128	113	46.6	26.6	29.0	
(WY)	1989	1993	1977	1977	1977	1977	1975	1977	1992	1992	1992	1992	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1964 - 1993

ANNUAL TOTAL	34601	107565										
ANNUAL MEAN	94.5	295										
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	609	May 1	2480	May 22	2530	May 28	1979					
LOWEST DAILY MEAN	24	Aug 26	31	Nov 11	24	Aug 26	1992					
ANNUAL SEVEN-DAY MINIMUM	25	Aug 24	37	Nov 21	25	Aug 24	1992					
ANNUAL RUNOFF (AC-FT)	68630		213400		157400							
10 PERCENT EXCEEDS	221		1040		627							
50 PERCENT EXCEEDS	45		110		80							
90 PERCENT EXCEEDS	27		42		47							

e Estimated

## JORDAN RIVER BASIN

10154500 WEBER - PROVO DIVERSION CANAL NEAR WOODLAND, UT

LOCATION.--Lat 40°36'40", long 111°18'15", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 2 S., R. 6 E., 100 ft upstream from entrance to flume above Provo River valley, and 4.6 mi northwest of Woodland.

PERIOD OF RECORD.--October 1931 to July 1969, during period of diversion only, October 1988 to current year. Subsequent to September 1990 irrigation season only.

GAGE.--Water-stage recorder. Elevation of gage is 6,410 ft above sea level, from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Canal diverts water from Weber River in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 1 S., R. 6 E., and from Beaver Creek in SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. R. 6 E., to Provo River.

EXTREMES FOR PERIOD OF RECORD.--(Period of diversion only) Maximum daily discharge, 870 ft<sup>3</sup>/s June 4, 1957; no water diverted from Weber River or Beaver Creek for several months each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	e.50	7.3	197	739	---	---	---
2	---	---	---	---	---	e.50	11	180	591	---	---	---
3	---	---	---	---	---	e.50	17	190	433	---	---	---
4	---	---	---	---	---	e.50	16	332	419	---	---	---
5	---	---	---	---	---	e.50	22	289	428	---	---	---
6	---	---	---	---	---	e.50	41	254	428	---	---	---
7	---	---	---	---	---	e.50	36	276	427	---	---	---
8	---	---	---	---	---	e.50	37	222	474	---	---	---
9	---	---	---	---	---	e.50	47	196	459	---	---	---
10	---	---	---	---	---	e.50	51	205	434	---	---	---
11	---	---	---	---	---	e.50	55	277	492	---	---	---
12	---	---	---	---	---	.50	56	374	565	---	---	---
13	---	---	---	---	---	.46	53	489	569	---	---	---
14	---	---	---	---	---	.44	52	634	462	---	---	---
15	---	---	---	---	---	.57	44	691	367	---	---	---
16	---	---	---	---	---	.66	50	708	373	---	---	---
17	---	---	---	---	---	1.1	50	817	363	---	---	---
18	---	---	---	---	---	2.1	59	824	401	---	---	---
19	---	---	---	---	---	2.2	63	720	505	---	---	---
20	---	---	---	---	---	2.4	53	761	512	---	---	---
21	---	---	---	---	---	3.4	58	683	505	---	---	---
22	---	---	---	---	---	3.4	80	693	505	---	---	---
23	---	---	---	---	---	3.4	102	645	502	---	---	---
24	---	---	---	---	---	5.8	114	732	495	---	---	---
25	---	---	---	---	---	7.9	105	714	495	---	---	---
26	---	---	---	---	---	13	125	652	495	---	---	---
27	---	---	---	---	---	14	150	616	497	---	---	---
28	---	---	---	---	---	16	182	620	495	---	---	---
29	---	---	---	---	---	14	214	662	492	---	---	---
30	---	---	---	---	---	11	219	747	485	---	---	---
31	---	---	---	---	---	7.5	---	749	---	---	---	---
TOTAL	---	---	---	---	---	115.33	2169.3	16149	14407	---	---	---
MEAN	---	---	---	---	---	3.72	72.3	521	480	---	---	---
MAX	---	---	---	---	---	.16	219	824	739	---	---	---
MIN	---	---	---	---	---	.44	7.3	180	363	---	---	---
AC-FT	---	---	---	---	---	229	4300	32030	28580	---	---	---

e Estimated



## JORDAN RIVER BASIN

249

10155000 PROVO RIVER NEAR HAILSTONE, UT

LOCATION.--Lat 40°36'03", long 111°19'51", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 36, T. 2 S., R. 5 E., Wasatch County, Hydrologic Unit 16020203, on left bank 0.25 mi downstream of bridge on State Highway 32, 4.5 mi upstream from Ross Creek and Hailstone. Prior to Apr. 8, 1993, at site 1.5 mi downstream.

DRAINAGE AREA.--219 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WDR UT-89-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,220 ft above sea level, from topographic map. Prior to Nov. 20, 1964 at datum 1.00 ft higher. Gage relocated 1.5 mi upstream on Apr. 8, 1993, to a site above the high water line of Jordanelle Reservoir, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Records include flow of Weber-Provo diversion canal and Duchesne Tunnel, a transmountain diversion. Flow also affected by irrigation diversions above station and by storage in several small reservoirs at headwaters. Information on flow of Duchesne Tunnel, and capacities of small reservoirs is available from Provo River Water Commissioner's Report, (total capacity, 10,080 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,100 ft<sup>3</sup>/s June 7, 1986, from rating curve extended above 2,500 ft<sup>3</sup>/s; gage height, 9.91 ft from floodmarks at site and datum then in use; minimum, 11 ft<sup>3</sup>/s Aug. 20, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,120 ft<sup>3</sup>/s May 22, gage height 9.70 ft; minimum daily discharge, 42 ft<sup>3</sup>/s Oct. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	73	e58	e66	e67	e70	195	527	3300	1400	218	139
2	42	87	e58	e68	e66	e70	223	530	2740	1190	209	120
3	43	69	e56	e64	e62	e64	193	599	2100	1030	197	112
4	45	58	e46	e62	e60	e68	194	999	1730	957	154	114
5	45	69	e50	e64	e62	e73	216	845	1670	850	146	114
6	46	62	e54	e66	e66	e81	210	744	1630	713	141	114
7	47	64	e54	e67	e68	e79	189	807	1460	615	132	106
8	46	67	e56	e68	e64	e83	193	639	1370	490	153	108
9	46	62	e56	e68	e66	e78	229	539	1280	453	146	114
10	46	49	e59	e68	e66	e83	246	555	1500	442	128	108
11	45	54	e64	e70	e68	85	246	748	1840	428	137	106
12	47	60	e64	e58	e64	76	240	1030	2090	396	126	101
13	49	68	e62	e70	e56	78	225	1360	2340	374	113	109
14	45	62	e51	e74	e51	85	216	1770	2180	331	102	115
15	44	64	e53	e72	e53	92	219	1980	1880	278	94	109
16	43	64	e56	e70	e60	94	230	2300	1880	281	92	119
17	44	64	e60	e68	e66	107	237	2550	1880	287	87	140
18	45	64	e64	e72	e68	136	303	2710	1700	258	83	133
19	45	64	e62	e70	e69	133	279	2660	1820	247	104	120
20	45	61	e61	e68	e68	135	246	2960	1950	224	118	101
21	47	60	e60	e69	e64	140	270	2990	2020	211	135	94
22	52	55	e60	e68	e67	134	346	3560	1970	218	130	92
23	53	e50	e60	e56	e70	150	461	3330	1880	318	132	91
24	52	e49	e58	e62	e68	178	456	3410	1740	529	130	93
25	57	e48	e55	e68	e69	215	398	3080	1800	324	129	96
26	52	e49	e58	e68	e60	274	460	2790	1770	362	139	94
27	44	e54	e58	e64	e65	267	533	2730	1800	335	132	91
28	43	e58	e59	e62	e72	276	590	2560	1780	277	126	90
29	54	e57	e60	e65	---	253	636	2380	1710	252	146	90
30	95	e52	e60	e60	---	214	614	2820	1570	244	141	87
31	95	---	e58	e68	---	183	---	3490	---	228	143	---
TOTAL	1544	1817	1790	2063	1805	4054	9293	59992	56380	14542	4163	3220
MEAN	49.8	60.6	57.7	66.5	64.5	131	310	1935	1879	469	134	107
MAX	95	87	64	74	72	276	636	3560	3300	1400	218	140
MIN	42	48	46	56	51	64	189	527	1280	211	83	87
AC-FT	3060	3600	3550	4090	3580	8040	18430	119000	111800	28840	8260	6390

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1993, BY WATER YEAR (WY)

	MEAN	86.4	97.9	92.7	88.5	93.8	115	309	1038	959	257	98.7	81.2
MAX	191	170	156	135	228	311	824	1935	2026	856	263	203	
(WY)	1983	1973	1956	1971	1962	1986	1962	1993	1957	1965	1965	1983	
MIN	43.7	59.0	55.4	54.7	55.5	65.4	113	131	102	25.3	20.9	27.2	
(WY)	1955	1977	1977	1977	1977	1977	1961	1977	1992	1961	1992	1960	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1954 - 1993

ANNUAL TOTAL	47299	160663		
ANNUAL MEAN	129	440		
HIGHEST ANNUAL MEAN			277	
LOWEST ANNUAL MEAN			445	1962
HIGHEST DAILY MEAN	908	May 20	3560	May 22 1993
LOWEST DAILY MEAN	17	Aug 21	42	Aug 21 1960
ANNUAL SEVEN-DAY MINIMUM	19	Aug 19	44	Jul 25 1961
ANNUAL RUNOFF (AC-FT)	93820		318700	200600
10 PERCENT EXCEEDS	255		1770	807
50 PERCENT EXCEEDS	65		101	106
90 PERCENT EXCEEDS	26		53	57

e Estimated

## JORDAN RIVER BASIN

10155100 PROVO RIVER BELOW JORDANELLE DAM, NEAR HEBER, UT

LOCATION.--Lat 40°35'42", long 111°25'41", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 6, T. 3 S., R. 5 E., Wasatch County, Hydrologic Unit 16020203, on left bank 2,000 ft downstream from Jordanelle Dam and 5.5 mi north of Heber City.

DRAINAGE AREA.--252 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,860 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Records include flow of Weber-Provo diversion canal and Duchesne Tunnel, a transmountain diversion. Flow affected, by Jordanelle Reservoir, capacity 329,000 acre-ft, irrigation diversions above station and by several small reservoirs at headwaters. Information on flow of Duchesne Tunnel, and capacities of small reservoirs is available from Provo River Water Commissioner's Report, (total capacity, 10,080 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,920 ft<sup>3</sup>/s May 23, 1993, gage height, 3.62 ft; minimum discharge, 23 ft<sup>3</sup>/s Oct. 16, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,920 ft<sup>3</sup>/s May 23, gage height 3.62 ft; minimum discharge, 23 ft<sup>3</sup>/s Oct. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	86	79	84	94	90	269	364	1860	1060	175	128
2	53	99	81	90	96	90	304	355	1670	1060	155	127
3	58	79	77	83	88	90	285	363	1530	920	139	115
4	62	64	57	85	78	88	270	513	1330	753	135	108
5	62	76	52	81	79	90	205	560	1230	609	135	106
6	63	71	71	80	81	94	152	443	1190	569	143	108
7	61	72	72	85	73	99	165	447	1190	491	167	107
8	61	77	81	87	76	101	215	443	1200	419	166	108
9	61	71	82	85	67	111	251	407	1210	373	156	101
10	63	59	81	84	65	113	285	344	1220	357	151	97
11	65	55	86	88	66	115	292	347	1240	351	151	98
12	65	59	87	85	70	102	170	505	1230	346	150	97
13	69	85	78	76	74	97	110	798	1230	338	133	96
14	64	81	64	87	66	113	107	1380	1240	310	124	96
15	59	80	80	92	93	123	106	1550	1030	264	113	96
16	54	80	70	90	151	127	110	1780	915	214	102	96
17	57	79	125	90	181	144	108	2030	1050	177	95	95
18	58	77	91	92	157	180	121	2080	1370	171	92	95
19	59	75	70	90	133	181	210	1910	1480	153	92	97
20	58	75	76	85	112	186	189	2040	1500	149	104	86
21	61	78	83	88	88	191	163	2130	1500	149	111	80
22	64	72	82	90	91	178	154	2090	1490	149	111	80
23	64	78	79	83	96	192	215	2540	1410	150	117	80
24	66	68	74	79	97	226	251	2390	1360	202	119	80
25	71	66	74	88	97	269	254	2120	1160	349	119	80
26	67	68	71	82	80	306	246	1880	1300	390	120	81
27	60	102	77	82	87	307	268	1920	1380	322	120	81
28	57	90	85	88	97	337	360	2120	1320	286	118	72
29	62	81	85	80	---	367	383	1720	1240	281	117	60
30	104	67	80	82	---	339	382	1510	1090	220	118	62
31	109	---	99	81	---	289	---	1800	---	190	123	---
TOTAL	1991	2270	2449	2642	2633	5335	6600	40879	39165	11772	3971	2813
MEAN	64.2	75.7	79.0	85.2	94.0	172	220	1319	1305	380	128	93.8
MAX	109	102	125	92	181	367	383	2540	1860	1060	175	128
MIN	53	55	52	76	65	88	106	344	915	149	92	60
AC-FT	3950	4500	4860	5240	5220	10580	13090	81080	77680	23350	7880	5580

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1993, BY WATER YEAR (WY)

	MEAN	74.3	90.6	89.9	88.8	95.8	140	214	943	705	221	82.7	69.9
MAX	84.4	106	101	92.4	97.5	172	220	1319	1305	380	128	93.8	
(WY)	1992	1992	1992	1992	1992	1993	1993	1993	1993	1993	1993	1993	1993
MIN	64.2	75.7	79.0	85.2	94.0	109	208	567	104	63.1	37.3	46.1	
(WY)	1993	1993	1993	1993	1993	1992	1992	1992	1992	1992	1992	1992	1992

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1992 - 1993

ANNUAL TOTAL	47194	122520		
ANNUAL MEAN	129	336		
HIGHEST ANNUAL MEAN			235	
LOWEST ANNUAL MEAN			336	1993
HIGHEST DAILY MEAN	736	May 9	2540	May 23 1993
LOWEST DAILY MEAN	27	Aug 13	52	Dec 5 1992
ANNUAL SEVEN-DAY MINIMUM	34	Aug 12	58	Oct 15 1992
ANNUAL RUNOFF (AC-FT)	93610		243000	
10 PERCENT EXCEEDS	225		1230	
50 PERCENT EXCEEDS	84		106	
90 PERCENT EXCEEDS	41		66	

## JORDAN RIVER BASIN

251

10155500 PROVO RIVER NEAR CHARLESTON, UT

LOCATION.--Lat 40°29'03", long 111°27'46", in NE $\frac{1}{4}$ , NE $\frac{1}{4}$ , SW $\frac{1}{4}$ , sec. 11, T. 4 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on left bank 1,000 ft upstream from Snake Creek and 1.5 mi northeast of Charleston.

DRAINAGE AREA.--350 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1938 to Sept. 1950, Oct. 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,460 ft above sea level, from topographic map. Prior to Oct. 1991 at different sites and datums.

REMARKS.--No estimated daily discharges. Records good. Records include flow of Weber-Provo diversion canal and Duchesne Tunnel, a transmountain diversion. Flow affected, by Jordanelle Reservoir, capacity 329,000 acre-ft, irrigation diversions above station and by several small reservoirs at headwaters. Information on flow of Duchesne Tunnel, and capacities of small reservoirs is available from Provo River Water Commissioner's Report, (total capacity, 10,080 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft<sup>3</sup>/s May 22, 1993, gage height, 6.29 ft; minimum, 13 ft<sup>3</sup>/s Oct. 24, 1940, Oct. 7, 1948 at site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,280 ft<sup>3</sup>/s May 22, gage height 6.29 ft; minimum daily discharge, 25 ft<sup>3</sup>/s Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	88	107	114	118	119	390	280	1930	924	115	79
2	27	128	114	116	124	120	466	264	1810	941	91	72
3	33	94	110	115	114	120	413	266	1690	837	79	62
4	40	72	84	115	97	116	378	495	1380	678	69	59
5	42	77	72	106	94	117	328	629	1240	538	62	58
6	45	78	98	107	83	121	255	507	1180	474	60	56
7	46	79	101	118	91	127	244	553	1190	422	99	49
8	45	82	110	114	86	130	303	523	1180	356	131	46
9	49	78	113	109	86	140	327	462	1160	327	122	55
10	51	69	111	114	86	145	373	364	1150	303	115	56
11	53	62	118	114	88	153	377	340	1140	287	120	55
12	52	65	124	116	86	147	276	463	1130	277	115	56
13	56	90	115	108	83	144	183	734	1130	266	103	56
14	54	105	94	113	68	153	167	1230	1110	235	86	55
15	50	107	110	117	67	179	161	1430	914	193	77	54
16	42	107	94	119	71	194	150	1560	779	150	61	55
17	36	106	100	117	74	233	130	1860	907	103	54	68
18	41	106	114	118	80	329	133	1890	1250	81	54	79
19	47	110	92	119	109	340	229	1930	1430	58	51	81
20	44	111	87	114	149	347	207	2000	1420	45	50	76
21	47	111	98	116	130	358	166	2080	1410	47	57	74
22	50	107	108	120	123	340	128	1970	1410	53	52	73
23	48	120	103	115	127	347	181	2210	1420	98	52	72
24	51	105	90	112	131	407	231	2120	1340	162	58	71
25	54	89	89	115	129	484	205	1890	1090	271	67	71
26	48	82	86	113	113	524	173	1690	1180	349	74	73
27	41	89	97	108	108	507	179	1750	1320	291	72	69
28	40	128	109	102	117	512	244	2030	1240	239	72	58
29	49	122	110	103	---	546	277	1730	1140	222	67	53
30	92	104	104	103	---	512	285	1470	982	178	68	55
31	123	---	98	100	---	421	---	1800	---	134	75	---
TOTAL	1521	2871	3160	3490	2832	8432	7559	38520	37652	9539	2428	1896
MEAN	49.1	95.7	102	113	101	272	252	1243	1255	308	78.3	63.2
MAX	123	128	124	120	149	546	466	2210	1930	941	131	81
MIN	25	62	72	100	67	116	128	264	779	45	50	46
AC-FT	3020	5690	6270	6920	5620	16720	14990	76400	74680	18920	4820	3760

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-50, 1992-93, BY WATER YEAR (WY)

	MEAN	58.1	108	109	110	116	159	298	662	545	103	43.3	43.3
MAX	125	150	140	127	140	272	710	1243	1255	308	78.3	74.3	
(WY)	1950	1992	1992	1950	1950	1993	1946	1993	1993	1993	1993	1947	
MIN	21.4	60.5	80.1	93.4	98.8	112	87.0	314	41.0	23.5	18.5	16.8	
(WY)	1941	1940	1940	1941	1944	1940	1940	1940	1992	1992	1992	1992	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1939-50, 1992-93

ANNUAL TOTAL	38769	119900		
ANNUAL MEAN	106	328		
HIGHEST ANNUAL MEAN			196	
LOWEST ANNUAL MEAN			328	
HIGHEST DAILY MEAN	645	May 21	2210	May 23
LOWEST DAILY MEAN	14	Sep 11	25	Oct 1
ANNUAL SEVEN-DAY MINIMUM	15	Sep 6	37	Oct 1
ANNUAL RUNOFF (AC-FT)	76900	237800	142100	
10 PERCENT EXCEEDS	156	1170	500	
50 PERCENT EXCEEDS	91	115	108	
90 PERCENT EXCEEDS	17	54	33	

## JORDAN RIVER BASIN

10156000 SNAKE CREEK NEAR CHARLESTON, UT

LOCATION.--Lat 40°29'07", long 111°27'59", in NE1/4NW1/4SW1/4 sec. 11, T. 4 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on right bank 700 ft upstream from mouth and 1.5 mi northeast of Charleston.

DRAINAGE AREA (REVISED).--31.8 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1938 to October 1950, May to September 1993. Monthly discharge only, September 1938 to September 1945, published in WSP 1413.

GAGE.--Water-stage recorder. Elevation of gage is 5,435 ft above sea level, from topographic map. Prior to 1993 at different datum.

REMARKS.--No estimated daily discharges. Records good. Some diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126 ft<sup>3</sup>/s June 4, 1943, gage height, 3.06 ft, datum then in use; minimum, 19 ft<sup>3</sup>/s May 1, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 117 ft<sup>3</sup>/s June 17, gage height, 3.28 ft; minimum daily discharge, 34 ft<sup>3</sup>/s Aug. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	44	86	59	39	39
2	---	---	---	---	---	---	---	39	77	53	39	36
3	---	---	---	---	---	---	---	37	75	53	38	37
4	---	---	---	---	---	---	---	44	75	55	39	37
5	---	---	---	---	---	---	---	43	82	58	42	39
6	---	---	---	---	---	---	---	43	66	56	41	39
7	---	---	---	---	---	---	---	44	63	53	47	40
8	---	---	---	---	---	---	---	41	58	52	41	40
9	---	---	---	---	---	---	---	41	51	53	41	42
10	---	---	---	---	---	---	---	40	52	53	42	41
11	---	---	---	---	---	---	---	37	60	44	39	41
12	---	---	---	---	---	---	---	38	53	49	39	40
13	---	---	---	---	---	---	---	37	50	46	38	39
14	---	---	---	---	---	---	---	40	53	40	39	39
15	---	---	---	---	---	---	---	43	65	39	39	41
16	---	---	---	---	---	---	46	53	78	39	39	43
17	---	---	---	---	---	---	47	55	100	35	38	42
18	---	---	---	---	---	---	47	52	91	35	34	41
19	---	---	---	---	---	---	51	51	76	36	35	42
20	---	---	---	---	---	---	48	52	66	41	36	42
21	---	---	---	---	---	---	49	58	91	41	37	43
22	---	---	---	---	---	---	49	69	99	44	37	43
23	---	---	---	---	---	---	48	73	92	59	37	45
24	---	---	---	---	---	---	48	84	86	59	37	45
25	---	---	---	---	---	---	47	85	69	47	37	44
26	---	---	---	---	---	---	54	91	64	47	37	43
27	---	---	---	---	---	---	51	103	61	45	37	43
28	---	---	---	---	---	---	53	96	60	44	37	45
29	---	---	---	---	---	---	54	91	58	44	38	47
30	---	---	---	---	---	---	54	93	61	43	38	48
31	---	---	---	---	---	---	---	86	---	39	37	---
TOTAL	---	---	---	---	---	---	---	1803	2118	1461	1194	1246
MEAN	---	---	---	---	---	---	---	58.2	70.6	47.1	38.5	41.5
MAX	---	---	---	---	---	---	---	103	100	59	47	48
MIN	---	---	---	---	---	---	---	37	50	35	34	36
AC-FT	---	---	---	---	---	---	---	3580	4200	2900	2370	2470

## 253

LOCATION.--Lat 40°25'54", long 111°21'07", in NW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub> sec. 35, T. 4 S., R. 5 E., Wasatch County, Hydrologic Unit 16020203, on right bank 6 mi southeast of Heber City and 7.5 mi upstream from Deer Creek Reservoir.

PERIOD OF RECORD.--August 1992 to September 1993.

REMARKS.--Records good except for estimated daily discharges, which are poor. Records may include flow from Strawberry River and Willow Creek Ditches, which are transmountain diversions.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 157 ft<sup>3</sup>/s May 22, gage height 6.17 ft; minimum, 1.2 ft<sup>3</sup>/s Nov. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992  
DAILY MEAN VALUES

[illegible]

## JORDAN RIVER BASIN

10157000 DANIELS CREEK ABOVE DIVERSIONS NEAR HEBER CITY, UT--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.2	e2.9	e3.4	e3.4	e3.5	7.9	47	44	21	9.3	6.3
2	3.0	3.9	e2.9	e3.4	e3.3	e3.5	9.5	52	46	20	10	6.5
3	3.0	3.4	e2.8	e3.2	e3.2	e3.2	8.3	64	41	20	11	6.5
4	3.1	3.0	e2.5	e3.1	e3.0	e3.4	8.0	86	33	19	11	6.4
5	3.1	2.8	e2.5	e3.3	e3.1	e3.6	8.8	67	30	19	11	6.6
6	3.1	2.7	e2.6	e3.4	e3.3	e4.0	8.0	52	28	18	9.3	6.8
7	3.1	2.7	e2.7	e3.4	e3.4	e3.9	7.4	50	41	17	8.8	6.8
8	3.0	2.8	e2.9	e3.3	e3.3	e4.1	7.2	45	39	16	9.6	6.8
9	2.7	2.6	e2.9	e3.3	e3.3	e4.5	8.0	38	36	15	8.9	6.8
10	2.6	2.4	e3.0	e3.5	e3.3	e4.4	9.4	38	34	14	8.9	6.6
11	2.6	2.1	e3.3	e3.5	e3.3	e4.3	9.7	53	32	13	9.7	6.5
12	2.6	2.5	e3.3	e2.9	e3.3	e3.8	9.8	81	31	13	8.9	6.4
13	2.6	2.3	e3.1	e3.3	e2.9	4.0	9.3	103	29	13	7.8	6.4
14	2.5	2.3	e2.6	e3.7	e2.5	4.0	9.3	109	28	12	7.5	6.8
15	2.4	2.3	e2.7	e3.6	e2.6	4.5	9.2	118	31	12	7.3	6.6
16	2.4	2.3	e2.8	e3.5	e2.9	4.6	9.5	115	30	12	7.1	7.2
17	2.4	2.3	e3.0	e3.5	e3.4	5.6	10	113	33	12	7.1	8.4
18	2.3	2.3	e3.2	e3.6	e3.4	7.9	14	112	30	11	6.9	8.5
19	2.2	2.4	e3.2	e3.5	e3.4	6.5	13	113	27	11	6.7	7.7
20	2.2	2.4	e3.1	e3.4	e3.4	6.4	12	111	25	11	6.8	6.9
21	2.1	2.4	e2.9	e3.5	e3.2	6.9	12	120	31	11	7.5	6.4
22	2.3	2.4	e3.1	e3.4	e3.3	6.6	14	140	29	11	6.9	6.9
23	2.2	2.5	e3.0	e2.8	e3.5	7.2	23	116	28	13	6.5	6.5
24	2.2	2.3	e2.9	e3.0	e3.4	8.2	25	103	27	14	6.2	6.5
25	2.4	e2.4	e2.8	e3.5	e3.4	8.8	24	97	26	12	6.2	5.5
26	2.5	e2.5	e2.9	e3.5	e3.0	9.9	28	91	25	12	6.3	5.5
27	2.3	e2.7	e3.0	e3.3	e3.2	10	42	80	24	11	6.2	5.5
28	2.4	e2.9	e3.0	e3.2	e3.6	9.9	51	66	22	10	6.1	5.5
29	2.5	e2.8	e3.1	e3.3	---	9.7	52	60	21	10	6.0	5.4
30	3.5	e2.6	e3.1	e3.0	---	8.6	49	53	20	9.9	5.9	5.4
31	4.0	---	e3.0	e3.4	---	7.8	---	48	---	9.5	6.0	---
TOTAL	82.4	78.2	90.6	104.1	90.3	183.3	508.3	2541	921	422.4	243.4	193.7
MEAN	2.66	2.61	2.92	3.36	3.22	5.91	16.9	82.0	30.7	13.6	7.85	6.46
MAX	4.0	3.9	3.3	3.7	3.6	10	52	140	46	21	11	8.5
MIN	2.1	2.1	2.3	2.8	2.5	3.2	7.2	38	20	9.5	5.9	5.4
AC-FT	163	155	180	206	179	364	1010	5040	1830	838	483	384

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1993, BY WATER YEAR (WY)

	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993
MEAN	2.66	2.61	2.92	3.36	3.22	5.91	16.9	82.0	30.7	13.6	7.85	6.46
MAX	2.66	2.61	2.92	3.36	3.22	5.91	16.9	82.0	30.7	13.6	7.85	6.46
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993
MIN	2.66	2.61	2.92	3.36	3.22	5.91	16.9	82.0	30.7	13.6	7.85	6.46
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993

## SUMMARY STATISTICS

## FOR 1993 WATER YEAR

ANNUAL TOTAL	5458.7
ANNUAL MEAN	15.0
HIGHEST DAILY MEAN	140
LOWEST DAILY MEAN	2.1
ANNUAL SEVEN-DAY MINIMUM	2.2
ANNUAL RUNOFF (AC-FT)	10830
10 PERCENT EXCEEDS	41
50 PERCENT EXCEEDS	6.2
90 PERCENT EXCEEDS	2.6

e Estimated

## 255

LOCATION.--Lat 40°24'12", long 111°31'44", in NE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub> sec. 7, T. 5 S., R. 4 E., Wasatch County, Hydrologic Unit 16020203, on right bank 200 ft upstream from Deer Creek, 1,000 ft downstream from Deer Creek Dam, and 4.1 mi northeast of Vivian Park.

PERIOD OF RECORD.--May 1953 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,270 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Deer Creek Reservoir and by small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River drain into Daniels Creek. Flow also affected by irrigation diversions above station and water diverted to Provo River by Weber-Provo diversion canal and Duchesne Tunnel, a transmountain diversion. Information is available for these stations from the Provo River Water Commissioner's Report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft<sup>3</sup>/s June 3, 1983, gage height, 9.11 ft; no flow Feb. 2, 3, 1957, Nov. 12, 19, 1961, when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,850 ft<sup>3</sup>/s June 3, gage height 7.08 ft; minimum daily discharge, 52 ft<sup>3</sup>/s Jan. 12, 14.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	75	65	66	62	73	79	481	1200	1120	435	581
2	125	76	65	66	62	73	84	491	1650	1140	435	615
3	127	75	65	66	62	71	80	502	1830	1030	424	581
4	127	74	65	71	62	70	80	546	1810	867	443	568
5	115	74	68	79	64	69	81	433	1780	797	406	564
6	99	71	66	74	63	69	79	373	1700	788	397	571
7	91	72	64	70	64	69	76	376	1670	759	398	568
8	87	69	65	127	64	68	72	377	1670	649	397	575
9	83	69	65	80	66	68	78	373	1660	583	384	584
10	79	67	64	56	67	68	86	376	1680	598	361	585
11	80	67	67	53	67	67	87	443	1690	584	338	582
12	78	68	70	52	68	66	86	531	1680	496	319	582
13	79	68	68	53	69	66	84	578	1660	468	360	579
14	77	68	66	52	69	65	244	567	822	443	398	589
15	79	68	65	53	69	64	336	578	380	432	437	572
16	75	69	66	56	69	65	325	582	397	448	461	558
17	73	68	66	58	71	68	299	664	386	480	461	499
18	74	69	65	60	71	71	300	877	1080	490	457	457
19	74	70	66	61	71	71	314	1380	1520	492	455	454
20	74	68	72	57	70	72	336	1610	1500	466	469	474
21	74	68	71	56	69	72	329	1650	1490	460	456	462
22	75	68	69	57	69	72	331	1680	1500	420	449	446
23	74	68	68	56	69	73	336	1730	1500	380	446	447
24	74	70	68	57	70	75	333	1740	1480	377	446	456
25	74	69	68	57	71	82	330	1800	1310	370	482	456
26	73	68	68	58	72	87	329	1820	1090	350	503	447
27	71	68	68	59	72	87	374	1820	1070	349	477	489
28	71	68	68	60	73	87	466	1830	1240	351	459	511
29	72	68	70	61	---	88	489	1370	1340	353	460	503
30	78	65	70	60	---	83	488	884	1220	387	463	488
31	77	---	66	61	---	80	---	850	---	405	483	---
TOTAL	2632	2085	2077	1952	1895	2259	7011	29312	41005	17332	13359	15843
MEAN	84.9	69.5	67.0	63.0	67.7	72.9	234	946	1367	559	431	528
MAX	127	76	72	127	73	88	489	1830	1830	1140	503	615
MIN	71	65	64	52	62	64	72	373	380	349	319	446
AC-FT	5220	4140	4120	3870	3760	4480	13910	58140	81330	34380	26500	31420

MEAN	207	189	230	207	213	247	329	607	844	502	418	340
MAX	490	509	508	418	681	1146	1202	1200	1613	927	575	581
(WY)	1984	1983	1983	1984	1986	1986	1986	1984	1983	1965	1986	1986
MIN	75.6	.80	67.0	57.3	53.1	42.8	75.5	.99	304	178	120	75.6
(WY)	1962	1963	1993	1989	1981	1961	1961	1977	1977	1961	1961	1961

## WATER YEARS 1954 - 1993

[illegible]



10163000 PROVO RIVER AT PROVO, UT

LOCATION.--Lat 40°14'16", long 111°41'55", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 3, T. 7 S., R. 2 E., Utah County, Hydrologic Unit 16020203, on left bank 1,300 ft downstream from bridge on State Highway 114, 2.1 mi west of Provo, and 2.1 mi upstream from mouth.

DRAINAGE AREA.--673 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1903 to June 1905, May 1933 to September 1934, January 1937 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "at San Pedro, Los Angeles and Salt Lake Railroad bridge, near Provo" 1903-04, and as "at Rio Grande Western Railroad bridge, near Provo" 1905.

REVISED RECORDS.--WSP 1564: 1904, 1934. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,510 ft above sea level, from topographic map. May 1903 to June 1905, nonrecording gages at site 0.8 mi upstream at different datums. May 1933 to September 1934, non-recording gage at present site at different datum. January 1937 to November 1938, water-stage recorder at site 1,000 ft upstream at different datum. November 1938 to August 1957, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station is below all diversions. At times entire flow is diverted above station for irrigation. Flow regulated by Deer Creek Reservoir and small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River drain into Daniels Creek. Flow affected by Weber-Provo diversion canal and Duchesne Tunnel, a transmountain diversion. Certain diversions for industrial use which reach Provo Bay, an arm of Utah Lake, are made above station; however, part of this flow is used for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,520 ft<sup>3</sup>/s May 6, 1952, gage height, 6.37 ft, datum then in use; no flow for several periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,670 ft<sup>3</sup>/s May 26, gage height, 7.14 ft; minimum daily discharge, 6.7 ft<sup>3</sup>/s Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	71	37	38	e53	e53	147	445	591	616	53	65
2	6.7	161	38	39	e55	53	189	429	1040	609	54	89
3	8.3	141	39	38	e53	52	171	323	1440	521	55	72
4	9.5	121	38	36	e49	51	168	406	1480	403	59	68
5	12	103	38	46	e47	48	164	396	1490	312	64	66
6	22	55	40	49	e53	46	149	431	1400	309	72	71
7	33	53	36	50	e56	48	140	470	1410	279	63	69
8	27	51	36	58	e59	51	132	434	1410	193	60	70
9	24	48	34	53	e58	58	130	398	1360	86	67	71
10	23	46	33	52	e57	54	143	337	1390	69	68	71
11	24	42	34	57	e53	55	144	329	1340	62	70	72
12	24	36	44	47	e51	53	144	362	1300	48	60	72
13	21	35	38	45	e48	58	147	370	1310	36	54	72
14	25	33	39	49	e46	67	320	379	668	35	54	77
15	31	37	37	52	e51	84	614	350	53	30	55	80
16	30	41	37	53	e52	79	560	341	50	29	57	87
17	21	40	37	e52	e55	89	524	402	144	25	51	113
18	23	40	39	e54	e56	114	517	542	606	22	58	132
19	19	39	39	e55	e57	98	519	967	1290	26	57	139
20	17	40	42	e54	e50	98	499	1320	1200	30	83	140
21	17	38	45	e55	e46	98	467	1380	1190	34	94	134
22	25	40	40	e55	e52	99	387	1490	1150	39	91	127
23	26	41	39	e53	e54	96	371	1610	1140	57	88	122
24	35	40	38	e50	e51	102	381	1540	1090	103	84	126
25	50	39	38	e48	e48	109	377	1590	912	90	79	123
26	34	37	47	e48	e45	121	372	1610	666	84	71	120
27	31	41	50	e49	e44	139	384	1530	569	77	61	117
28	45	43	44	e50	e49	159	465	1530	762	70	58	123
29	41	43	43	e48	---	162	479	1130	833	63	54	125
30	93	41	44	e45	---	159	428	466	769	59	59	111
31	108	---	39	e51	---	146	---	403	---	56	54	---
TOTAL	914.1	1636	1222	1529	1448	2699	9632	23710	30053	4472	2007	2924
MEAN	29.5	54.5	39.4	49.3	51.7	87.1	321	765	1002	144	64.7	97.5
MAX	108	161	50	58	59	162	614	1610	1490	616	94	140
MIN	6.7	33	33	36	44	46	130	323	50	22	51	65
AC-FT	1810	3250	2420	3030	2870	5350	19110	47030	59610	8870	3980	5800

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1993, BY WATER YEAR (WY)

MEAN	140	216	265	247	253	277	315	318	369	47.8	21.1	47.0
MAX	512	585	574	513	818	1257	1345	1396	1571	390	210	278
(WY)	1984	1983	1983	1984	1986	1986	1986	1952	1983	1965	1983	1986
MIN	10.9	25.6	39.4	24.7	35.5	40.9	24.3	2.22	2.33	.68	1.12	1.56
(WY)	1961	1963	1993	1989	1989	1961	1961	1961	1977	1946	1960	1960

## SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

## WATER YEARS 1944 - 1993

[illegible]

e Estimated

## JORDAN RIVER BASIN

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10164500 AMERICAN FORK ABOVE UPPER POWERPLANT, NEAR AMERICAN FORK, UT

LOCATION.--Lat 40°26'52", long 111°40'53", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 26, T. 4 S., R. 2 E., Utah County, Hydrologic Unit 16020201, on left bank 600 ft downstream from Rock Creek, 1,000 ft upstream from intake for upper powerplant of Utah Power & Light Co., 4.0 mi upstream from mouth of canyon, and 6.7 mi northeast of American Fork.

DRAINAGE AREA.--51.1 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1927 to current year. Monthly discharge only January 1927 to September 1945, published in WSP 1314.

REVISED RECORDS.--WSP 1634: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,950 ft above sea level, from topographic map. Prior to Sept. 8, 1965, at same site at different datum. Sept. 8, 1965 to Nov. 20, 1967, at site 300 ft upstream.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Silver Lake Flat Reservoir (constructed 1971) and Tibble Reservoir; total capacity, 1,260 acre-ft.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--66 years, 55.8 ft<sup>3</sup>/s, 40,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, occurred July 30, 1953, gage height, 9.20 ft, from floodmark; minimum, 1.1 ft<sup>3</sup>/s Dec. 20, 1976 (result of freezeup).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 531 ft<sup>3</sup>/s May 23; minimum daily discharge, 12 ft<sup>3</sup>/s Nov. 25, 26, May 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	18	15	14	14	14	34	30	e451	e337	e102	52
2	15	22	15	14	14	13	37	29	e421	e307	e98	53
3	15	19	15	13	14	13	36	26	e401	e297	e92	52
4	15	18	14	11	14	13	36	28	e387	e288	e92	52
5	15	18	14	9.6	13	14	35	28	e372	e278	e90	51
6	15	17	15	12	14	14	32	20	e357	e258	e88	51
7	15	17	15	14	14	15	32	20	e342	e228	e88	50
8	15	16	15	15	15	16	33	17	e327	e218	e85	50
9	15	16	15	15	15	15	34	13	e313	e199	e85	49
10	15	15	15	15	15	15	35	15	e303	e194	e84	49
11	14	13	15	13	14	15	36	12	e343	e189	e84	48
12	15	14	16	15	15	16	36	14	e348	e184	e81	48
13	14	15	15	15	14	16	36	13	e398	e182	e79	47
14	14	15	14	15	14	16	36	13	e404	e181	e71	47
15	15	15	15	15	14	18	37	17	e434	e179	e64	46
16	15	15	14	15	14	18	38	27	e499	e164	e66	47
17	15	15	15	15	14	21	40	205	e499	e159	e63	48
18	14	15	15	15	14	22	46	e314	e394	e154	e67	49
19	14	16	14	15	16	21	47	e321	e395	e149	e69	46
20	15	16	13	14	15	20	46	e375	e425	e146	e69	45
21	15	14	13	14	13	20	46	e421	e425	e144	e67	44
22	17	15	13	14	13	21	48	e501	e355	e143	e65	45
23	16	15	13	14	13	26	52	e531	e355	e193	e63	44
24	16	13	14	13	13	27	52	e491	e366	e193	e60	44
25	17	12	13	13	14	32	51	e484	e366	e163	e59	44
26	17	12	13	14	15	34	53	e515	e356	e163	e57	44
27	16	13	14	14	14	38	47	e512	e386	e153	e56	43
28	16	14	15	14	14	38	40	e455	e376	e143	e54	43
29	19	15	15	14	---	37	45	e455	e367	e133	e53	42
30	29	15	14	14	---	34	33	e471	e357	e123	e54	41
31	21	---	14	14	---	33	---	e431	---	e117	54	---
TOTAL	493	463	446	431.6	395	665	1209	6804	11522	5959	2259	1414
MEAN	15.9	15.4	14.4	13.9	14.1	21.5	40.3	219	384	192	72.9	47.1
MAX	29	22	16	15	16	38	53	531	499	337	102	53
MIN	14	12	13	9.6	13	13	32	12	303	117	53	41
AC-FT	978	918	885	856	783	1320	2400	13500	22850	11820	4480	2800

CAL YR 1992 TOTAL 9848 MEAN 26.9 MAX 92 MIN 12 AC-FT 19530  
WTR YR 1993 TOTAL 32060.6 MEAN 87.8 MAX 531 MIN 9.6 AC-FT 63590

e Estimated

## JORDAN RIVER BASIN

10166430 WEST CANYON CREEK NEAR CEDAR FORT, UT

LOCATION (REVISED).--Lat 40°24'19", long 112°05'59", in NW¼, NE¼, NE¼, sec. 7, T. 5 S., R. 2 W., Utah County, on right bank 100 ft upstream from a right bank diversion, 540 ft downstream from 6 ft culvert, and 5.3 mi north of Cedar Fort.

DRAINAGE AREA.--26.8 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1965 to October 1975, October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,620 ft above sea level, from topographic map. Prior to July 21, 1993 at site 700 ft upstream at different datum.

REMARKS.--Records poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,660 ft<sup>3</sup>/s Aug. 28, 1971, gage height, 7.50 ft from slope-area measurement; minimum, 0.02 ft<sup>3</sup>/s Jan. 17, '22, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 42 ft<sup>3</sup>/s May 21; minimum daily discharge, 0.03 ft<sup>3</sup>/s Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.16	e.11	e.13	e.11	e.16	5.8	8.4	e26	11	e5.6	e2.1
2	.03	1.1	e.12	e.13	e.12	e.18	7.4	8.3	e25	10	e5.6	e1.9
3	.04	.81	e.10	e.11	e.11	e.20	6.4	9.7	e24	10	e5.2	e1.8
4	.06	e.54	e.08	e.09	e.10	e.22	6.2	14	e23	9.9	e5.0	e1.7
5	.11	e.52	e.09	e.08	e.10	e.22	6.3	11	e21	9.1	e4.7	e1.6
6	.13	e.50	e.09	e.09	e.09	e.23	6.0	e13	e20	8.5	e4.6	e1.6
7	.14	e.46	e.11	e.09	e.10	e.26	5.9	e14	e18	8.3	e4.5	e1.6
8	.20	e.40	e.12	e.09	e.11	e.35	5.9	e14	e17	7.9	e4.2	e1.8
9	.16	e.35	e.11	e.11	e.11	e.45	6.1	e16	e15	7.8	e4.0	e2.0
10	.16	e.35	e.12	e.11	e.12	e.60	6.3	e18	14	7.6	5.6	1.8
11	.14	e.35	e.12	e.10	e.11	e.70	6.6	e20	14	7.6	e4.0	1.6
12	.13	e.30	e.11	e.09	e.13	e.70	6.7	e23	15	7.3	e4.1	1.5
13	.12	e.26	e.10	e.10	e.12	e.88	6.4	e26	16	7.2	e3.9	1.6
14	.12	e.22	e.10	e.10	e.11	e1.0	6.2	e27	16	6.8	e3.9	1.7
15	.11	e.18	e.09	e.11	e.11	e1.1	6.1	e29	17	7.1	e3.7	1.7
16	.11	e.15	e.10	e.11	e.10	e1.2	5.9	e29	18	7.4	e3.7	2.0
17	.09	e.14	e.10	e.10	e.11	e1.3	6.1	e31	17	7.8	e3.7	2.4
18	.09	e.12	e.09	e.12	e.12	e1.4	6.4	e37	15	8.1	e3.7	2.3
19	.09	e.11	e.08	e.11	e.14	e1.5	6.5	e39	14	8.4	e3.5	1.8
20	.12	e.11	e.09	e.12	e.13	e1.6	6.6	e41	14	8.8	e3.3	1.4
21	.14	e.11	e.11	e.13	e.12	e1.7	6.7	e42	15	7.5	e3.3	1.1
22	.22	e.10	e.10	e.13	e.12	e1.8	6.6	e41	15	e6.6	e3.2	1.96
23	.19	e.09	e.11	e.12	e.13	e1.8	6.6	e39	14	e8.0	e3.1	1.2
24	.17	e.08	e.11	e.11	e.13	e1.9	6.5	e37	13	e7.6	e3.1	1.5
25	.30	e.09	e.11	e.12	e.12	e2.0	6.5	e35	12	e7.0	e3.1	1.5
26	.25	e.10	e.10	e.11	e.12	e2.2	7.0	e32	12	e6.6	e3.0	1.3
27	.23	e.10	e.10	e.10	e.13	e2.5	9.2	e30	12	e6.2	e2.8	1.3
28	.25	e.10	e.11	e.10	e.14	e3.0	8.1	e29	12	e6.2	e2.7	1.3
29	.25	e.10	e.12	e.10	---	e3.5	8.4	e29	12	e6.2	e2.5	1.3
30	.62	e.09	e.12	e.10	---	e4.1	8.8	e28	11	e6.2	e2.4	1.3
31	.35	---	e.11	e.11	---	e5.0	---	e27	---	e5.6	e2.2	---
TOTAL	5.20	8.09	3.23	3.32	3.26	43.75	200.2	797.4	487	240.3	117.9	48.66
MEAN	.17	.27	.10	.11	.12	1.41	6.67	25.7	16.2	7.75	3.80	1.62
MAX	.62	1.1	.12	.13	.14	5.0	9.2	42	26	11	5.6	2.4
MIN	.03	.08	.08	.08	.09	.16	5.8	8.3	11	5.6	2.2	.96
AC-FT	10	16	6.4	6.6	6.5	87	397	1580	966	477	234	.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1993, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	1.19	.96	.67	.54	.51	.87	4.45	14.0	11.4	4.88	2.57	1.54																
MAX	3.67	3.00	1.48	1.40	1.56	2.69	17.4	44.2	27.6	21.2	8.90	4.47																
(WY)	1987	1987	1974	1987	1987	1972	1969	1973	1975	1975	1975	1975																
MIN	.17	.17	.10	.062	.057	.11	.11	3.05	1.63	.66	.26	.21																
(WY)	1993	1991	1993	1991	1991	1990	1991	1990	1992	1992	1992	1989																

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1966 - 1993

ANNUAL TOTAL	283.92	1958.31	3.65	1973
ANNUAL MEAN	.78	5.37	8.65	1992
HIGHEST ANNUAL MEAN			.89	1992
LOWEST ANNUAL MEAN			85	May 20 1973
HIGHEST DAILY MEAN	5.0	May 20	.03	Oct 2 1992
LOWEST DAILY MEAN	.03	Oct 2	.08	Oct 1 1991
ANNUAL SEVEN-DAY MINIMUM	.07	Sep 29	.05	Jan 17 1991
ANNUAL RUNOFF (AC-FT)	563	3880	2640	
10 PERCENT EXCEEDS	2.1	15	11	
50 PERCENT EXCEEDS	.37	1.6	1.1	
90 PERCENT EXCEEDS	.10	.10	.18	

e Estimated

## JORDAN RIVER BASIN

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## 10168300 TAILRACE AT STAIRS PLANT NEAR SALT LAKE CITY, UT

LOCATION.--Lat 40°37'26", long 111°45'05", in NW¼, SE¼, SW¼, sec. 20, T. 2 S., R. 2 E., Salt Lake County, Hydrologic Unit 16120204 on left bank at Stairs plant, 14 mi southeast of Salt Lake City.

DRAINAGE AREA.--49.2 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1925 to current year. Prior to 1986, not published, records available from Utah Power & Light Co.

GAGE.--Water-stage recorder. Elevation of gage is 5,460 ft above sea level, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 23.8 ft<sup>3</sup>/s, 17,240 acre-ft/yr.

COOPERATION.--Records collected by Utah Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78 ft<sup>3</sup>/s July 1, 1954; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	15	16	11	13	13	42	30	47	48	46	48
2	15	15	16	11	13	13	44	33	47	48	46	48
3	14	12	16	11	13	13	44	36	47	43	46	48
4	11	15	13	9.2	12	13	44	38	47	48	46	46
5	13	19	15	10	13	14	44	47	46	48	45	45
6	13	18	15	13	13	14	40	24	47	48	45	47
7	12	17	14	15	13	15	35	38	47	48	43	46
8	11	18	14	14	13	16	32	48	48	48	43	44
9	13	16	15	14	13	20	34	36	39	48	46	43
10	12	14	18	14	13	20	35	35	38	42	46	42
11	12	14	18	13	13	19	35	40	45	.52	47	40
12	12	16	15	12	13	19	35	40	37	17	47	38
13	12	15	13	14	13	18	33	43	38	50	47	40
14	12	15	15	13	9.6	18	31	42	43	50	46	40
15	12	15	15	13	11	18	29	42	43	46	46	40
16	12	14	12	13	12	20	29	38	44	49	45	38
17	11	14	16	13	12	28	29	37	48	49	46	40
18	12	14	15	13	12	26	28	43	49	48	46	43
19	11	15	13	13	12	25	25	44	48	48	45	41
20	12	16	14	12	13	29	32	36	48	48	43	37
21	11	16	14	12	12	29	36	39	48	47	44	34
22	12	16	14	13	12	29	41	20	47	47	44	40
23	11	14	14	13	13	22	44	40	48	48	43	37
24	11	15	15	10	14	32	41	46	48	48	42	34
25	14	14	12	13	13	27	39	47	46	44	40	35
26	14	16	14	12	12	44	46	43	48	36	47	34
27	13	16	15	11	13	42	48	42	33	41	47	33
28	11	16	14	13	13	43	46	44	48	47	48	32
29	16	17	8.2	13	---	46	46	46	48	46	48	30
30	18	14	8.1	13	---	47	40	48	48	46	48	25
31	17	---	9.9	13	---	44	---	48	---	47	46	---
TOTAL	398	461	436.2	387.2	351.6	776	1127	1233	1358	1371.52	1407	1188
MEAN	12.8	15.4	14.1	12.5	12.6	25.0	37.6	39.8	45.3	44.2	45.4	39.6
MAX	18	19	18	15	14	47	48	48	49	50	48	48
MIN	11	12	8.1	9.2	9.6	13	25	20	33	52	40	25
AC-FT	789	914	865	768	697	1540	2240	2450	2690	2720	2790	2360

CAL YR 1992 TOTAL 8309.49 MEAN 22.7 MAX 48 MIN .99 AC-FT 16480  
WTR YR 1993 TOTAL 10494.52 MEAN 28.8 MAX 50 MIN .52 AC-FT 20820

## JORDAN RIVER BASIN

## 10170500 SURPLUS CANAL AT SALT LAKE CITY, UT

LOCATION.--Lat 40°43'37", long 111°55'33", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 14, T. 1 S., R. 1 W., Salt Lake County, Hydrologic Unit 16020204, near right bank on upstream side of diversion dam at head of canal, and 250 ft downstream from highway bridge over Jordan River on 2100 South Street.

PERIOD OF RECORD.--December 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,223.93 ft above sea level. Prior to Oct. 22, 1952, at site 350 ft downstream, and Oct. 22, 1952 to Sept. 30, 1966, at site 400 ft downstream at different datum, Sept. 30, 1966 to Oct. 1, 1989 at datum 10.0 ft lower.

REMARKS.--Records fair. Flow regulated by diversion structure at station. Canal was built to bypass floodwater of Jordan River around Salt Lake City residential and industrial area (see station 10170490 for records of combined flow of Jordan River and Surplus Canal). Several diversions for irrigation and waterfowl ponds below station.

AVERAGE DISCHARGE.--50 years, 371 ft<sup>3</sup>/s, 268,800 acre-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft<sup>3</sup>/s June 1, 1984, gage height, 8.91 ft, datum then in use. No flow Jan. 21 to Feb. 28, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,230 ft<sup>3</sup>/s May 22, gage height, 16.01 ft; minimum daily discharge, 104 ft<sup>3</sup>/s Oct. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	164	153	191	250	284	370	175	1350	563	157	234
2	126	790	153	202	250	277	520	160	1210	556	163	229
3	138	377	140	193	250	272	394	175	1160	621	149	231
4	138	174	140	195	251	265	346	1130	919	579	162	238
5	136	142	140	200	255	263	377	732	957	540	212	226
6	132	145	138	199	261	264	343	884	1020	463	227	239
7	131	141	139	204	263	268	319	1490	908	449	237	245
8	136	139	138	210	244	275	301	1630	819	428	365	226
9	137	147	157	212	236	280	287	909	693	380	406	237
10	127	154	159	213	257	290	286	553	625	354	380	247
11	126	148	172	221	253	316	273	491	583	395	422	249
12	135	144	252	210	270	292	306	605	602	408	285	238
13	128	138	195	208	264	280	319	611	577	395	270	263
14	126	132	180	211	256	294	280	756	595	347	250	270
15	132	128	194	221	251	326	272	832	720	347	227	232
16	132	126	178	237	245	263	283	946	838	340	215	241
17	118	126	172	239	232	261	307	962	1100	341	219	356
18	109	147	172	257	228	294	337	959	893	320	224	382
19	109	272	173	260	298	271	321	987	768	272	212	342
20	107	254	170	244	375	271	303	1150	832	221	212	301
21	104	195	171	257	345	274	294	1640	1060	218	230	285
22	133	173	169	322	308	270	284	3030	1080	266	211	274
23	127	192	168	315	288	264	283	2050	1140	505	226	264
24	126	162	173	298	331	297	391	1400	977	876	228	255
25	143	151	164	286	340	312	319	1340	811	424	197	240
26	137	151	173	275	313	341	322	1420	886	768	181	226
27	130	142	175	266	298	448	310	1440	939	441	199	233
28	130	147	213	258	292	551	247	1440	1050	344	209	233
29	137	150	204	252	---	445	182	1380	818	251	201	216
30	191	150	204	251	---	466	163	1280	612	211	217	202
31	283	---	196	253	---	398	---	1290	---	162	234	---
TOTAL	4192	5601	5325	7360	7704	9672	9339	33847	26542	12785	7327	7654
MEAN	135	187	172	237	275	312	311	1092	885	412	236	255
MAX	283	790	252	322	375	551	520	3030	1350	876	422	382
MIN	104	126	138	191	228	261	163	160	577	162	149	202
AC-FT	8310	11110	10560	14600	15280	19180	18520	67140	52650	25360	14530	15180

CAL YR 1992 TOTAL 61819 MEAN 169 MAX 790 MIN 104 AC-FT 122600  
WTR YR 1993 TOTAL 137348 MEAN 376 MAX 3030 MIN 104 AC-FT 272400

LOCATION.--Lat 40°44'01", long 111°55'21", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, sec. 14, T. 1 S., R. 1 W., Salt Lake County, Hydrologic Unit 16020204, on right bank at 1700 South Street and about 1000 West, Salt Lake City, 4,000 ft downstream from diversion structure at head of Surplus Canal, and 1.7 mi downstream from Mill Creek.

WATER-DISCHARGE RECORDS

REVISED RECORDS.--WDR UT-88-1: 1987 (combined flow).

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow completely regulated since reconstruction in May 1952 of Surplus Canal diversion dam 4,000 ft upstream. Flow affected by regulation at Utah Lake, Deer Creek Reservoir, other storage and regulation, and importation of water from other basins. Many diversions above station for irrigation, industrial, and municipal water supplies. For records of Surplus Canal see station 10170500. For records of combined flow, see following page.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 449 ft<sup>3</sup>/s Aug. 20, 1986, gage height, 4.41 ft; maximum gage height, 5.75 ft June 26, 1952; no flow May 10, 24, 1952. May 21, 22, 1962, Sept. 21, 1963, May 14 to June 1, 1964, and Sept. 6, 7, 1965 entire flow diverted to Surplus Canal. Maximum daily combined discharge (Jordan River and Surplus Canal), 4,510 ft<sup>3</sup>/s June 1, 1984; minimum daily, 89 ft<sup>3</sup>/s June 23, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 441 ft<sup>3</sup>/s May 4, gage height, 5.12 ft, affected by backwater from storm drain discharge at 1700 So. and 1300 So. pumping stations; minimum daily discharge, 6.6 ft<sup>3</sup>/s May 16, 18, 19. Maximum daily combined discharge during year (Jordan River and Surplus Canal), 3,080 ft<sup>3</sup>/s May 22; minimum daily discharge, 193 ft<sup>3</sup>/s Oct. 21.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	98	96	61	52	65	e109	178	12	141	160	149
2	101	e147	96	63	52	66	e120	174	11	138	161	148
3	102	95	94	63	53	65	97	177	14	137	159	150
4	101	117	92	57	54	65	94	e285	9.5	131	168	151
5	102	117	92	52	53	65	94	e144	9.1	127	168	150
6	101	111	90	51	54	65	91	e166	9.8	121	158	139
7	99	106	89	52	55	66	89	e208	40	121	161	132
8	100	105	89	52	61	66	87	e200	88	123	176	130
9	100	106	e82	52	e71	67	85	e153	79	147	193	131
10	99	106	77	53	e73	68	83	e136	76	165	188	132
11	98	106	e82	53	e72	e72	82	e133	73	168	192	133
12	100	106	e90	52	e74	84	85	e126	94	171	177	132
13	99	106	75	51	73	97	87	e88	129	172	174	133
14	98	104	73	50	e70	e99	82	8.4	135	170	171	142
15	100	105	74	51	70	e103	82	7.5	141	171	168	149
16	100	105	72	52	68	95	77	6.6	143	171	164	150
17	97	104	69	52	67	e95	73	6.9	151	166	163	164
18	95	105	67	54	66	e100	87	e6.6	134	162	162	163
19	96	115	66	56	e74	95	84	6.6	127	188	160	159
20	94	e116	64	54	e78	96	83	8.1	126	207	159	154
21	89	111	64	56	e76	98	82	e15	131	206	162	152
22	88	e108	65	60	e73	98	81	46	131	213	159	151
23	86	e111	64	58	e71	97	80	18	130	e245	161	150
24	87	107	63	56	e74	100	e98	13	141	e268	161	149
25	88	104	61	55	e74	102	e81	12	165	e218	158	149
26	88	104	62	54	e70	104	82	14	165	e263	156	146
27	86	104	61	53	68	e112	80	15	166	e211	150	147
28	90	103	69	52	68	e128	117	15	169	194	145	148
29	96	98	66	51	---	e117	162	14	159	180	144	146
30	e104	97	65	52	---	e118	175	12	146	171	145	144
31	e117	---	62	52	---	109	---	12	---	161	148	---
TOTAL	3003	3227	2331	1680	1864	2777	2809	2404.7	3104.4	5427	5071	4373
MEAN	96.9	108	75.2	54.2	66.6	89.6	93.6	77.6	103	175	164	146
MAX	117	147	96	63	78	128	175	285	169	268	193	164
MIN	86	95	61	50	52	65	73	6.6	9.1	121	144	130
AC-FT	5960	6400	4620	3330	3700	5510	5570	4770	6160	10760	10060	8670

MEAN	162	148	146	148	151	138	120	112	145	158	156	164
MAX	253	223	230	292	274	258	251	210	258	253	242	245
(WY)	1985	1986	1986	1985	1985	1952	1952	1989	1991	1984	1983	1985
MIN	78.7	64.9	75.2	54.2	66.6	58.3	31.3	25.5	69.9	68.3	68.3	63.5
(WY)	1964	1964	1993	1993	1993	1962	1986	1964	1975	1961	1963	1963

## e Estimated

## JORDAN RIVER BASIN

10171000 JORDAN RIVER AT SALT LAKE CITY, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1978, October 1980 to September 1981.

WATER TEMPERATURES: April 1975 to September 1978, October 1980 to September 1981.

INSTRUMENTATION.--Specific conductance recorder October 1974 to September 1981; temperature recorder April 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,330 microsiemens Mar. 29, 1977; minimum, 536 microsiemens June 25, 1978.

WATER TEMPERATURES: Maximum, 28.0°C Aug. 29, 30, 1975; minimum, 0.5°C Jan. 2, 3, 1976.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	TURBIDITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BAROMETRIC PRES-SURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CaCO3)
NOV 16, 1992	1220	103	1720	8.0	10.0	12.0	29	7.2	654	150	620	470
FEB 01, 1993	1300	52	1900	8.1	1.0	8.0	3.9	9.3	656	540	520	520
APR 06, 1993	1045	89	1640	8.0	6.0	10.0	15	8.3	650	93	99	440
JUL 28, 1993	1200	187	1280	8.0	28.0	17.5	25	7.5	654	620	370	330
AUG 30, 1993	1050	142	1700	8.1	21.5	16.5	21	7.5	657	1100	470	460

DATE	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	CARBONATE WATER DIS-SOLVED FIELD (MG/L AS CO3)	BICARBONATE WATER DIS-SOLVED FIELD (MG/L AS HCO3)	ALKALINITY WAT DIS-TOT IT FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)
NOV 16, 1992	110	47	170	43	3	15	0	318	261	280	230	0.60
FEB 01, 1993	120	53	180	42	3	15	0	336	275	280	270	0.40
APR 06, 1993	100	46	150	42	3	12	0	288	236	260	230	0.50
JUL 28, 1993	73	36	120	43	3	11	0	239	196	190	150	0.40
AUG 30, 1993	100	51	170	44	3	14	0	286	234	280	220	0.70

DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
NOV 16, 1992	23	1090	1060	1.48	303	4.75	4.75	0.250	0.250	5.00	5.00	1.60
FEB 01, 1993	22	1140	1140	1.55	159	5.32	5.32	--	0.180	--	5.50	--
APR 06, 1993	19	1030	982	1.40	248	3.87	3.87	--	0.130	--	4.00	--
JUL 28, 1993	15	832	731	1.13	420	3.28	3.28	--	0.020	--	3.30	--
AUG 30, 1993	18	1030	1020	1.40	395	3.78	3.78	--	0.020	--	3.80	--



## JORDAN RIVER BASIN

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10171000 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
NOV, 1992											
16...	1.90	2.4	1.5	3.1	8.1	36	2.70	1.90	2.00	2.00	6.1
FEB, 1993											
01...	1.30	1.7	0.70	2.0	7.5	--	1.80	1.70	--	1.80	5.5
APR											
06...	1.10	1.4	0.90	2.0	6.0	--	1.20	1.10	--	1.00	3.1
JUL											
28...	0.070	0.09	0.73	0.80	4.1	--	0.870	0.800	--	0.730	2.2
AUG											
30...	0.060	0.08	0.54	0.60	4.4	--	0.950	0.920	--	0.930	2.9

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV, 1992							
16...	1220	<10	50	<3	21	100	41
APR, 1993							
06...	1045	<10	56	<3	12	100	38
JUL							
28...	1200	20	55	<3	5	87	23
AUG							
30...	1050	10	63	<3	7	110	24

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV, 1992						
16...	<10	<1	2	<1.0	970	8
APR, 1993						
06...	10	5	3	<1.0	950	<6
JUL						
28...	20	1	2	<1.0	770	<6
AUG						
30...	20	1	2	<1.0	990	<6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV, 1992						
16...	1220	103	12.0	--	91	25
FEB, 1993						
01...	1300	52	8.0	--	21	2.9
01...	1320	52	8.0	--	21	--
01...	1323	52	8.0	--	18	2.5
01...	1327	52	8.0	--	18	2.5
01...	1330	52	8.0	--	26	3.7
01...	1335	52	8.0	--	25	3.5
APR						
06...	1045	89	10.0	96	38	9.1
06...	1105	89	10.0	98	11	2.6
06...	1108	89	10.0	94	33	7.9
06...	1111	89	10.0	91	43	10
06...	1114	89	10.0	97	38	9.1
06...	1117	89	10.0	97	40	9.6
JUL						
28...	1200	187	17.5	--	63	32
AUG						
30...	1050	142	16.5	--	50	19

10170490 JORDAN RIVER AT SALT LAKE CITY, UT--Continued

Combined discharge, in cubic feet per second, of Jordan River and Surplus Canal

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	262	249	252	302	349	479	353	1360	704	317	383
2	227	937	249	265	302	343	640	334	1220	694	324	377
3	240	472	234	256	303	337	491	352	1170	758	308	381
4	239	291	232	252	305	330	440	1410	928	709	330	389
5	238	259	232	252	308	328	471	876	966	666	380	376
6	233	256	228	250	315	329	434	1050	1030	584	385	378
7	230	247	228	256	318	334	408	1700	948	570	398	377
8	236	244	227	262	305	341	388	1830	907	551	541	356
9	237	253	239	264	307	347	372	1060	772	527	599	368
10	226	260	236	266	330	358	369	689	701	519	568	379
11	224	254	254	274	325	388	355	624	656	563	614	382
12	235	250	342	262	344	376	391	731	696	579	462	370
13	227	244	270	259	337	377	406	699	706	567	444	396
14	224	236	253	261	326	393	362	764	730	517	421	412
15	232	233	268	272	321	429	354	839	861	518	395	381
16	232	231	250	289	313	358	360	953	981	511	379	391
17	215	230	241	291	299	356	380	969	1250	507	382	520
18	204	252	239	311	294	394	424	966	1030	482	386	545
19	205	387	239	316	372	366	405	994	895	460	372	501
20	201	370	234	298	453	367	386	1160	958	428	371	455
21	193	306	235	313	421	372	376	1650	1190	424	392	437
22	221	281	234	382	381	368	365	3080	1210	479	370	425
23	213	303	232	373	359	361	363	2070	1270	750	387	414
24	213	269	236	354	405	397	489	1410	1120	1140	389	404
25	231	255	225	341	414	414	400	1350	976	642	355	389
26	225	255	235	329	383	445	404	1430	1050	1030	337	372
27	216	246	236	319	366	560	390	1450	1100	652	349	380
28	220	250	282	310	360	679	364	1450	1220	538	354	381
29	233	248	270	303	---	562	344	1390	977	431	345	362
30	295	247	269	303	---	584	338	1290	758	382	362	346
31	400	---	258	305	---	507	---	1300	---	323	382	---
TOTAL	7195	8828	7656	9040	9568	12449	12148	36223	29636	18205	12398	12027
MEAN	232	294	247	292	342	402	405	1168	988	587	400	401
MAX	400	937	342	382	453	679	640	3080	1360	1140	614	545
MIN	193	230	225	250	294	328	338	334	656	323	308	346
AC-FT	14270	17510	15190	17930	18980	24690	24100	71850	58780	36110	24590	23860
CAL YR 1992	TOTAL 107560											
WTR YR 1993	TOTAL 175373											
MEAN	294	480	294	480	3080	193	193	AC-FT	213300			
MEAN	480	3080	193	193	AC-FT	213300	347900					

## JORDAN RIVER BASIN

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10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT  
(Hydrologic bench mark station)

LOCATION.--Lat 40°46'48", long 111°48'19", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 35, T. 1 N., R. 1 E., Salt Lake County, Hydrologic Unit 16020204, on right bank 0.4 mi upstream from dam forming Red Butte Reservoir, and 1.7 mi north-east of Fort Douglas.

DRAINAGE AREA.--7.25 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Figures of monthly discharge for January 1942 to September 1963, collected by Corps of Engineers, U.S. Army, available in files of Salt Lake City District Office, Geological Survey.

GAGE.--Water-stage recorder. Elevation of gage is 5,400 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105 ft<sup>3</sup>/s May 28, 1983, maximum gage height, 3.81 ft May 17, 1984; minimum, 0.17 ft<sup>3</sup>/s Nov. 20, 1992, possible ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 28	1645	17	1.67	May 7	0415	*52	*3.14

Minimum daily discharge, 0.48 ft<sup>3</sup>/s, Nov. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.90	1.0	e1.0	1.2	e1.4	11	11	10	5.3	3.2	1.9
2	.55	1.8	1.0	1.0	1.2	e1.4	12	11	10	5.1	3.2	1.9
3	.58	1.1	1.0	.90	1.2	1.5	11	12	11	5.2	3.1	1.9
4	.58	1.0	e.90	e.84	1.2	1.5	10	18	9.8	5.1	3.0	1.9
5	.59	1.0	e.90	e.80	e1.1	1.5	10	17	9.6	5.0	3.0	1.8
6	.60	.97	.97	e.84	1.2	1.5	9.6	22	9.3	4.8	2.9	1.8
7	.60	.96	.93	e.88	1.2	1.6	9.0	44	11	4.7	2.9	1.8
8	.62	.97	.98	1.1	1.2	1.8	8.8	33	10	4.6	2.9	1.8
9	.63	.95	1.0	1.1	1.3	2.1	8.7	27	9.4	4.5	2.8	1.8
10	.64	.94	1.0	1.1	1.3	2.5	8.6	25	8.9	4.4	2.8	1.7
11	.64	e.87	1.1	1.0	1.3	2.5	8.7	26	8.7	4.2	2.8	1.7
12	.67	e.88	1.1	.86	1.3	2.3	8.8	27	8.4	4.2	2.7	1.7
13	.67	.95	1.0	.87	1.3	2.3	8.5	27	8.1	4.1	2.6	1.8
14	.67	.95	e.97	1.1	e1.3	2.3	8.2	27	7.9	4.0	2.6	1.8
15	.67	.95	e.95	1.1	e1.3	3.1	8.0	25	7.7	3.9	2.5	1.7
16	.67	.95	e.95	1.1	e1.3	3.8	8.2	24	7.6	3.9	2.5	1.8
17	.67	.95	e.98	1.1	1.3	5.2	8.3	23	7.7	3.8	2.5	2.0
18	.68	.95	1.0	1.1	1.3	6.9	9.0	21	7.3	3.7	2.4	1.9
19	.68	.95	e.97	1.1	1.5	7.1	9.4	20	7.1	3.6	2.4	1.9
20	.69	.61	e.95	1.1	1.3	8.0	9.3	19	6.9	3.5	2.3	1.8
21	.71	.98	1.0	1.2	1.6	8.5	9.3	19	6.7	3.5	2.4	1.8
22	.74	.89	1.0	1.2	1.6	8.2	9.7	18	6.7	3.6	2.3	1.8
23	.72	.48	.99	e1.1	1.5	8.8	10	17	6.5	4.2	2.2	1.8
24	.73	.90	1.0	e1.1	1.5	9.8	11	15	6.3	4.1	2.1	1.8
25	.74	.94	e.96	e1.1	e1.3	11	10	15	6.2	3.8	2.1	1.8
26	.74	.95	e.95	e1.1	e1.2	13	10	14	6.0	4.5	2.1	1.8
27	.72	1.0	e1.0	e1.1	e1.3	13	11	13	5.9	3.8	2.1	1.7
28	.75	1.1	1.0	e1.1	e1.4	16	11	12	5.7	3.5	2.1	1.7
29	.84	1.0	1.0	e1.1	---	15	11	12	5.6	3.4	2.0	1.7
30	1.1	e.93	1.0	e1.0	---	13	12	11	5.4	3.4	2.0	1.7
31	1.0	---	e.98	1.2	---	11	---	11	---	3.3	2.0	---
TOTAL	21.45	28.77	30.53	32.29	36.7	187.6	290.1	616	237.4	128.7	78.5	54.0
MEAN	.69	.96	.98	1.04	1.31	6.05	9.67	19.9	7.91	4.15	2.53	1.80
MAX	1.1	1.8	1.1	1.2	1.6	1.6	12	44	11	5.3	3.2	2.0
MIN	.55	.48	.90	.80	1.1	1.4	8.0	11	5.4	3.3	2.0	1.7
AC-FT	43	57	61	64	73	372	575	1220	471	255	156	107

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1993, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	1.95	2.02	1.93	1.96	2.37	4.42	9.13	13.4	6.85	3.33	2.17	1.86																		
MAX	3.86	3.53	3.37	3.46	7.00	12.8	22.2	50.5	29.7	9.22	5.77	4.10																		
(WY)	1984	1984	1984	1971	1986	1983	1986	1983	1983	1983	1983	1983																		
MIN	.68	.93	.91	.83	1.00	1.06	1.79	1.55	.95	.60	.44	.47																		
(WY)	1991	1991	1964	1964	1964	1964	1990	1990	1992	1990	1990	1990																		

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1964 - 1993

ANNUAL TOTAL	436.82	1742.04	
ANNUAL MEAN	1.19	4.77	
HIGHEST ANNUAL MEAN			4.29
LOWEST ANNUAL MEAN			1.12
HIGHEST DAILY MEAN			9.5
LOWEST DAILY MEAN			.38
ANNUAL SEVEN-DAY MINIMUM			.39
ANNUAL RUNOFF (AC-FT)	866	3460	3110
10 PERCENT EXCEEDS	2.3	11	9.7
50 PERCENT EXCEEDS	1.0	1.9	2.4
90 PERCENT EXCEEDS	.51	.87	1.1

e Estimated

## JORDAN RIVER BASIN

10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1964 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: April 1964 to September 1978.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCHI, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV, 1992												
12...	1225	0.90	740	8.5	3.0	2.5	0.40	10.8	633	K3	19	370
FEB, 1993												
11...	1120	1.4	715	8.6	2.0	2.0	0.90	12.0	625	K1	--	360
MAR												
23...	1013	8.8	580	8.4	6.0	4.0	12	9.8	625	K1	87	300
JUN												
14...	1237	7.9	590	8.5	24.0	11.0	2.1	9.1	627	K7	K5	310
JUL												
27...	1145	3.7	620	8.5	18.5	9.5	0.40	9.0	629	7	19	300
AUG												
31...	1400	2.0	600	8.4	22.0	11.0	0.20	9.0	626	10	180	310

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
NOV, 1992											
12...	100	29	14	8	0.3	1.0	9	284	248	160	13
FEB, 1993											
11...	100	27	13	7	0.3	1.0	7	249	216	140	15
MAR											
23...	86	20	13	9	0.3	1.0	2	216	180	110	13
JUN											
14...	87	23	11	7	0.3	0.90	8	285	247	66	12
JUL											
27...	82	24	12	8	0.3	0.90	10	279	245	84	12
AUG											
31...	78	27	12	8	0.3	0.80	14	239	220	91	12

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
NOV, 1992											
12...	0.10	11	486	478	0.66	1.18	0.035	0.020	0.010	0.055	<0.050
FEB, 1993											
11...	0.10	11	472	437	0.64	1.73	--	--	0.020	--	<0.050
MAR											
23...	<0.10	11	364	363	0.50	8.65	0.070	--	<0.010	--	0.070
JUN											
14...	0.20	11	336	360	0.46	7.19	--	--	<0.010	--	<0.050
JUL											
27...	0.20	11	357	374	0.49	3.60	--	--	<0.010	--	<0.050
AUG											
31...	0.10	12	324	365	0.44	1.75	--	--	<0.010	--	<0.050

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
NOV, 1992											
12...	0.020	0.030	0.04	--	<0.20	--	0.060	0.040	0.030	0.030	0.09
FEB, 1993											
11...	--	0.010	0.01	--	<0.20	--	0.030	0.020	--	0.020	0.06
MAR											
23...	--	0.020	0.03	0.28	0.30	0.37	0.060	0.050	--	0.030	0.09
JUN											
14...	--	0.020	0.03	0.18	0.20	0.20	0.120	0.020	--	0.020	0.06
JUL											
27...	--	0.020	0.03	--	<0.20	--	0.030	<0.010	--	0.020	0.06
AUG											
31...	--	0.020	0.03	--	<0.20	--	0.040	0.020	--	0.030	0.09

K Results based on colony count outside acceptable range (non-ideal colony county).

## JORDAN RIVER BASIN

267

10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV , 1992							
12...	1225	<10	58	<3	27	11	2
FEB , 1993							
11...	1120	<10	53	<3	<3	7	2
JUN							
14...	1237	<10	53	<3	25	9	6
JUL							
27...	1145	20	54	<3	11	6	6

DATE	TIME	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV , 1992							
12...		<10	<1	1	<1.0	650	<6
FEB , 1993							
11...		<10	<1	<1	<1.0	630	<6
JUN							
14...		<10	<1	<1	<1.0	370	<6
JUL							
27...		<10	<1	<1	<1.0	420	<6

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)
MAR									
23...	1013	3.9	1.2	1.5	1.4	1.1	1.4	0.44	1.4
AUG									
31...	1400	2.7	<0.6	1.3	<0.6	1.0	<0.6	0.11	1.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV , 1992						
12...	1225	0.90	2.5	--	21	0.05
FEB						
11...	1120	1.4	2.0	--	36	0.13
MAR						
23...	1013	8.8	4.0	75	67	1.6
23...	1040	8.8	4.0	75	63	1.5
23...	1042	8.8	4.0	68	66	1.6
23...	1044	8.8	4.0	62	65	1.5
JUN						
14...	1237	7.9	11.0	87	15	0.32
14...	1250	7.9	11.0	62	16	0.34
14...	1253	7.9	11.0	64	19	0.41
14...	1255	7.9	11.0	63	26	0.56
14...	1257	7.9	11.0	84	13	0.28
14...	1300	7.9	11.0	83	16	0.34
JUL						
27...	1145	3.7	9.5	--	16	0.16
AUG						
31...	1400	2.0	11.0	--	13	0.07

## RUSH VALLEY

10172700 VERNON CREEK NEAR VERNON, UT

LOCATION.--Lat 39°58'46", long 112°22'46", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 2, T. 10 S., R. 5 W., Tooele County, Hydrologic Unit 16020304, on right bank 6.6 mi upstream from confluence with Dutch Creek forming Faust Creek and 8.3 mi southeast of Vernon.

DRAINAGE AREA.--25.0 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1958 to current year.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above sea level, from AMS topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 825 ft<sup>3</sup>/s Aug. 27, 1972, gage height, 5.70 ft, based on slope-area measurement; minimum, 0.41 ft<sup>3</sup>/s Nov. 20, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Apr. 17	2000	*21	*1.35	May 16	2300	11	1.21
Apr. 23	0200	13	1.25				

Minimum daily discharge, 1.2 ft<sup>3</sup>/s many days during October-February.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.5	1.4	1.4	1.4	1.5	6.3	6.2	5.4	3.5	2.6	2.5
2	1.2	1.7	1.4	e1.3	1.4	e1.4	6.9	6.3	5.4	3.4	2.6	2.5
3	1.2	1.6	1.4	e1.2	e1.3	e1.3	5.7	6.7	5.2	3.4	2.6	2.5
4	1.2	1.5	e1.3	e1.2	e1.2	1.4	5.9	8.4	5.1	3.5	2.6	2.5
5	1.2	1.5	e1.3	e1.3	e1.3	1.4	6.2	8.1	5.3	3.4	2.6	2.5
6	1.2	1.5	1.4	e1.4	1.4	1.4	5.3	7.8	5.6	3.4	2.6	2.5
7	1.2	1.4	1.4	1.5	1.4	1.4	4.6	8.1	5.2	3.3	2.6	2.5
8	1.2	1.4	1.4	1.5	1.4	1.4	4.7	7.7	5.1	3.3	2.5	2.5
9	1.2	1.4	1.4	1.4	1.5	1.5	4.9	7.3	4.8	3.2	2.4	2.4
10	1.2	1.4	1.4	1.4	1.4	1.5	4.9	7.1	4.8	3.2	2.5	2.2
11	1.2	1.4	1.4	1.3	1.4	1.5	4.7	7.2	4.6	3.2	2.5	2.1
12	1.2	1.4	e1.3	e1.2	1.4	1.5	4.4	7.5	4.5	3.2	2.5	2.2
13	1.2	1.4	1.3	e1.2	e1.3	1.5	4.3	8.1	4.4	3.2	2.4	2.3
14	1.3	1.4	e1.2	1.3	e1.2	1.6	4.3	9.3	4.4	3.2	2.4	2.3
15	1.3	1.4	e1.3	1.4	e1.2	1.8	4.6	10	4.3	3.1	2.5	2.2
16	1.3	1.4	1.4	1.4	e1.2	1.9	5.5	10	4.3	3.1	2.5	2.3
17	1.3	1.4	e1.3	1.4	e1.3	2.1	8.4	9.9	4.5	3.1	2.6	2.5
18	1.3	1.4	e1.2	1.4	1.3	3.1	9.5	9.2	4.3	3.1	2.6	2.5
19	1.3	1.4	e1.2	1.4	1.6	2.7	6.9	8.6	4.2	3.0	2.5	2.3
20	1.3	1.4	e1.2	1.4	1.6	2.8	6.3	8.2	4.1	3.0	2.5	2.3
21	1.3	1.4	1.4	1.4	1.6	3.0	6.2	7.9	4.0	2.9	2.6	2.3
22	1.4	1.4	e1.3	1.4	1.5	3.0	6.9	7.8	3.9	3.0	2.6	2.4
23	1.4	1.5	1.5	1.5	1.5	3.1	9.3	7.4	3.9	3.2	2.6	2.4
24	1.4	1.4	e1.4	1.6	e1.4	3.5	6.7	7.3	3.9	3.2	2.5	2.4
25	1.4	e1.3	e1.3	1.4	1.5	4.6	6.1	6.8	3.9	3.2	2.5	2.5
26	1.4	e1.2	1.4	1.4	e1.4	6.4	6.2	6.4	3.8	3.2	2.6	2.5
27	1.4	e1.3	1.4	e1.3	1.4	8.1	6.5	6.3	3.7	3.0	2.5	2.5
28	1.4	1.4	1.4	e1.2	1.6	7.7	6.2	6.2	3.7	3.0	2.5	2.5
29	1.4	1.4	1.4	e1.2	---	7.7	6.2	6.1	3.7	2.8	2.5	2.5
30	2.2	e1.3	1.4	e1.3	---	5.9	6.1	5.8	3.6	2.6	2.5	2.5
31	1.7	---	e1.3	1.4	---	5.4	---	5.5	---	2.6	2.5	---
TOTAL	41.1	42.5	41.8	42.1	39.1	93.1	180.7	235.2	133.6	97.5	78.5	72.1
MEAN	1.33	1.42	1.35	1.36	1.40	3.00	6.02	7.59	4.45	3.15	2.53	2.40
MAX	2.2	1.7	1.5	1.6	1.6	8.1	9.5	10	5.6	3.5	2.6	2.5
MIN	1.2	1.2	1.2	1.2	1.2	1.3	4.3	5.5	3.6	2.6	2.4	2.1
AC-FT	82	84	83	84	78	185	358	467	265	193	156	143

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1993, BY WATER YEAR (WY)

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993		
MEAN	3.12	3.04	2.93	2.91	3.00	3.42	5.81	6.90	4.23	3.37	3.10	3.06																									
MAX	9.08	8.89	7.93	7.92	7.65	9.30	21.6	40.0	19.3	12.3	10.1	9.61																									
(WY)	1984	1985	1985	1985	1985	1985	1983	1983	1983	1983	1983	1983																									
MIN	1.06	1.20	1.23	1.08	1.32	1.42	1.42	1.20	1.20	1.05	1.01	1.11																									
(WY)	1960	1960	1960	1961	1961	1961	1961	1961	1961	1961	1961	1959																									

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1959 - 1993

ANNUAL TOTAL	529.9	1097.3	
ANNUAL MEAN	1.45	3.01	
HIGHEST ANNUAL MEAN			3.74
LOWEST ANNUAL MEAN			12.0
HIGHEST DAILY MEAN			1.26
LOWEST DAILY MEAN	2.3	10	70
ANNUAL SEVEN-DAY MINIMUM	1.1	May 15	
ANNUAL RUNOFF (AC-FT)	1.1	Oct 1	
10 PERCENT EXCEEDS	1.8	2180	2710
50 PERCENT EXCEEDS	1.4	6.3	7.6
90 PERCENT EXCEEDS	1.2	1.3	2.4

e Estimated

## TOOELE VALLEY

269

10172726 FAUST CREEK BELOW TOOELE CITY WELL NEAR VERNON, UT

LOCATION.--Lat 40°08'51", long 112°26'39", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 6, T. 8 S., R. 5 W., Tooele County, Hydrologic Unit 16020304, on right bank, 100 ft below Tooele City well, 2.0 mi southwest of Faust, and 4.0 mi north of Vernon.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,295 ft above sea level, from topographic map.

REMARKS.--Records poor. Gage installed to determine discharge from pumped well.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 8.1 ft<sup>3</sup>/s Apr. 9, 1992; no flow many days during 1991 and 1992.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6.9 ft<sup>3</sup>/s Oct. 14; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	.00	.00	.00	.00	.00	.00	.10	.07	.34	.17	.79
2	4.0	.00	.00	.00	.00	.00	.00	.06	.06	.49	.22	.62
3	2.1	.00	.00	.00	.00	.00	.00	.13	.00	.37	.42	.30
4	.20	.00	.00	.00	.00	.00	.00	.00	.14	.44	.16	.14
5	3.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
6	4.9	.00	.00	.00	.00	.00	.00	.00	.00	.38	.00	.00
7	3.5	.00	.00	.00	.00	.00	.00	.00	.00	.69	.13	.08
8	1.3	.00	.00	.00	.00	.00	.00	.00	.00	.49	2.5	.27
9	2.9	.00	.00	.00	.00	.00	.00	.00	.09	.77	2.2	.29
10	5.0	.00	.00	.00	.00	.00	.00	.00	.11	.84	.35	.38
11	.00	.00	.00	.00	.00	.00	.00	.00	.08	.32	.25	.34
12	.00	.00	.00	.00	.00	.00	.00	.00	.12	.66	.50	.00
13	2.3	.00	.00	.00	.00	.00	.00	.04	.00	.85	.68	.29
14	6.9	.00	.00	.00	.00	.00	.00	.03	.13	.77	.00	.65
15	5.7	.00	.00	.00	.00	.00	.00	.07	.12	1.3	.00	.69
16	3.6	.00	.00	.00	.00	.00	.00	.13	.41	.90	.30	3.5
17	.00	.00	.00	.00	.00	.00	.00	.00	.50	.95	.48	4.5
18	.00	.00	.00	.00	.00	.00	.00	.00	.26	.61	.62	1.2
19	.00	.00	.00	.00	.00	.00	.00	.12	.12	.41	.72	.00
20	.00	.00	.00	.00	.00	.00	.00	.33	.00	.72	.00	4.3
21	.00	.00	.00	.00	.00	.00	.00	.41	.00	.69	.30	.86
22	.00	.00	.00	.00	.00	.00	.08	.00	.27	.00	.00	.01
23	.00	.00	.00	.00	.00	.00	.51	.00	.21	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.05	.07	.33	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.05	.36	.00	.10	.00
26	.00	.00	.00	.00	.00	.00	.21	.11	.54	.00	.26	.00
27	.00	.00	.00	.00	.00	.00	.27	.05	.37	.00	.26	.00
28	.00	.00	.00	.00	.00	.00	.24	.10	.27	.26	.24	.01
29	.00	.00	.00	.00	.00	.00	.06	.05	.43	.08	.00	.01
30	.00	.00	.00	.00	.00	.00	.14	.00	.35	.26	.18	6.5
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.74	.39	.00
TOTAL	47.90	0.00	0.00	0.00	0.00	0.00	1.56	1.79	5.34	14.33	11.43	25.83
MEAN	1.55	.0000	.0000	.0000	.0000	.0000	.052	.058	.18	.46	.37	.86
MAX	6.9	.00	.00	.00	.00	.00	.51	.41	.54	1.3	2.5	6.5
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	95	.00	.00	.00	.00	.00	3.1	3.6	11	28	23	51

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1993, BY WATER YEAR (WY)

	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
MEAN	.86	.075	.14	.000	.000	1.09	1.33	.34	.44	.65	1.07	1.34
MAX	1.55	.15	.28	.000	.000	2.18	2.62	.63	.69	.84	1.77	1.81
(WY)	1993	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992
MIN	.18	.000	.000	.000	.000	.000	.052	.058	.18	.46	.37	.86
(WY)	1992	1993	1993	1992	1992	1993	1993	1993	1993	1993	1993	1993

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1991 - 1993

ANNUAL TOTAL	369.52	108.18	.61
ANNUAL MEAN	1.01	.30	.93
HIGHEST ANNUAL MEAN			.30
LOWEST ANNUAL MEAN			.30
HIGHEST DAILY MEAN	8.1 Apr 9	6.9 Oct 14	8.1 Apr 9
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 11	.00 Dec 28
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 17	.00 Dec 28
ANNUAL RUNOFF (AC-FT)	733	215	445
10 PERCENT EXCEEDS	3.2	.67	2.3
50 PERCENT EXCEEDS	.00	.00	.07
90 PERCENT EXCEEDS	.00	.00	.00



## TOOELE VALLEY

10172727 FAUST CREEK NEAR VERNON, UT

LOCATION.--Lat 40°09'38", long 112°25'49", in NE $\frac{1}{4}$ , SE $\frac{1}{4}$ , SW $\frac{1}{4}$ , sec. 32, T. 7 S., R. 5 W., Tooele County, Hydrologic Unit 16020304, on left bank 30 ft west of State Highway 36, approximately 1 mi south of Faust, and 4.5 mi north of Vernon.

DRAINAGE AREA.--145 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22 ft<sup>3</sup>/s Mar. 10, 1993, gage height, 5.96 ft, maximum gage height, 6.08 ft, Nov. 2, 1992 (backwater from aquatic growth); minimum daily discharge, 0.8 ft<sup>3</sup>/s, Sept. 3, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22 ft<sup>3</sup>/s Mar. 10, gage height, 5.96 ft, maximum gage height, 6.08 ft, Nov. 2, (backwater from aquatic growth); minimum daily discharge, 0.11 ft<sup>3</sup>/s several days in August and September.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.8	e1.7	e1.3	e1.2	e5.4	8.7	3.2	.98	.46	.23	.12
2	1.2	4.8	e1.8	e1.4	e1.2	e5.4	8.8	3.1	.95	.43	.21	.11
3	1.2	2.1	e1.7	e1.1	e1.3	e6.0	8.3	3.1	1.0	.40	.22	.11
4	1.2	1.8	e1.5	e1.1	e1.3	e6.4	8.1	4.8	1.0	.43	.28	.11
5	1.2	1.7	e1.6	e1.0	e1.2	7.0	8.1	7.4	1.3	.44	.30	.13
6	1.4	1.6	e1.5	e1.1	e1.3	9.5	7.8	6.6	1.4	.41	.25	.14
7	1.5	1.6	e1.6	e1.1	e1.2	14	7.6	7.4	1.8	.34	.25	.13
8	1.4	1.5	e1.7	e1.2	e1.3	16	7.2	7.0	2.1	.30	.23	.12
9	1.4	1.5	e1.8	e1.3	e1.4	17	6.7	5.5	1.9	.31	.23	.12
10	1.5	1.4	e1.7	e1.4	e1.6	17	6.1	4.2	1.6	.31	.28	.12
11	1.5	1.5	e1.7	e1.3	e1.8	17	5.6	3.5	1.4	.28	.30	.12
12	1.4	1.5	e1.7	e1.2	e1.8	13	5.4	3.2	1.2	.27	.24	.11
13	1.4	1.5	e1.6	e1.3	e1.6	12	5.3	2.7	1.1	.26	.21	.13
14	1.6	1.4	e1.5	e1.3	e1.5	12	5.1	2.5	1.1	.28	.20	.16
15	2.1	1.5	e1.3	e1.4	e1.5	14	5.0	2.4	.99	.27	.17	.18
16	2.9	1.5	e1.3	e1.4	e1.4	12	4.8	2.5	.91	.24	.13	.22
17	2.3	1.6	e1.4	e1.4	e1.7	12	4.5	2.8	1.1	.24	.15	.28
18	1.9	1.7	e1.4	e1.5	e2.0	18	3.9	3.2	1.1	.23	.16	.31
19	1.7	1.8	e1.3	e1.4	e2.5	13	3.5	2.9	.96	.22	.16	.32
20	1.7	1.9	e1.2	e1.4	e2.4	9.9	3.1	2.6	.86	.19	.14	.34
21	1.7	e1.8	e1.3	e1.5	e2.3	8.2	3.1	2.6	.88	.20	.15	.35
22	1.7	e1.9	e1.4	e1.5	e2.2	7.4	3.1	2.6	.80	.27	.15	.38
23	1.7	e1.8	e1.5	e1.4	e2.5	6.7	3.1	2.4	.70	.39	.15	.39
24	1.6	e1.7	e1.4	e1.3	e2.7	5.8	3.2	2.2	.69	.41	.13	.41
25	2.1	e1.6	e1.3	e1.2	e2.6	5.5	3.1	2.0	.66	.38	.11	.44
26	1.9	e1.6	e1.3	e1.2	e4.3	5.4	3.1	1.7	.62	.43	.12	.46
27	1.8	e1.7	e1.2	e1.2	e4.7	5.8	3.2	1.4	.57	.38	.12	.48
28	1.8	e1.8	e1.3	e1.1	e5.0	7.1	3.1	1.3	.53	.35	.12	.51
29	1.8	e1.7	e1.3	e1.1	---	16	3.1	1.2	.50	.30	.12	.53
30	3.4	e1.6	e1.2	e1.2	---	15	3.1	1.1	.49	.28	.11	.56
31	3.0	---	e1.2	e1.2	---	10	---	1.1	.49	.25	.12	---
TOTAL	54.2	52.9	45.4	39.5	57.4	329.5	154.8	100.2	31.19	9.95	5.74	7.89
MEAN	1.75	1.76	1.46	1.27	2.05	10.6	5.16	3.23	1.04	.32	.19	.26
MAX	3.4	4.8	1.8	1.5	5.0	18	8.8	7.4	2.1	.46	.30	.36
MIN	1.2	1.4	1.2	1.0	1.2	5.4	3.1	1.1	.49	.19	.11	.11
AC-FT	108	105	90	78	114	654	307	199	62	20	11	16

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1993, BY WATER YEAR (WY)

	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
MEAN	1.39	1.36	1.16	1.10	2.28	6.70	3.64	2.35	.97	.89	.28	.43
MAX	1.75	1.76	1.46	1.27	2.49	10.6	5.16	3.23	1.10	1.95	.37	.60
(WY)	1993	1993	1993	1993	1992	1993	1993	1993	1991	1991	1992	1992
MIN	1.04	.96	.86	.93	2.05	2.76	2.12	1.47	.76	.32	.19	.26
(WY)	1992	1992	1992	1992	1993	1992	1992	1992	1992	1993	1993	1993

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1991 - 1993

ANNUAL TOTAL	512.72	888.67	1.83
ANNUAL MEAN	1.40	2.43	2.43
HIGHEST ANNUAL MEAN			1.22
LOWEST ANNUAL MEAN			1.22
HIGHEST DAILY MEAN	4.8 Nov 2	18 Mar 18	18 Mar 18
LOWEST DAILY MEAN	.08 Sep 3	.11 Aug 25	.08 Sep 3
ANNUAL SEVEN-DAY MINIMUM	.10 Aug 28	.11 Aug 29	.10 Aug 28
ANNUAL RUNOFF (AC-FT)	1020	1760	1320
10 PERCENT EXCEEDS	2.8	6.5	3.3
50 PERCENT EXCEEDS	1.3	1.4	1.1
90 PERCENT EXCEEDS	.33	.21	.27

e Estimated

## TOOELE VALLEY

271

10172765 CLOVER CREEK ABOVE BIG HOLLOW, NEAR CLOVER, UT

LOCATION.--Lat 40°20'06", long 112°31'39", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 33, T. 55 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on left bank 60 ft south of State Highway 199 at milepost 15.9, and 4.6 mi west of St. John.

DRAINAGE AREA.--6.71 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1984 to current year.

GAGE.--Water-stage recorder and sharp crested weir. Elevation of gage is 5,660 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33 ft<sup>3</sup>/s May 21, 1993, gage height, 2.05 ft; minimum daily discharge, 0.74 ft<sup>3</sup>/s Jan. 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33 ft<sup>3</sup>/s May 21, gage height, 2.05 ft; minimum daily discharge, 0.74 ft<sup>3</sup>/s Jan. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.1	e.80	e.80	e.90	e1.1	5.8	8.1	18	12	7.8	5.5
2	1.0	1.3	e.80	e.80	e.92	e1.1	6.8	7.7	16	11	7.6	5.4
3	1.0	1.1	e.76	e.80	e1.0	e1.2	6.0	9.0	15	11	7.5	5.3
4	1.1	1.1	e.80	e.76	e1.0	e1.3	5.8	13	13	12	7.5	5.3
5	1.1	1.1	e.80	e.74	e1.0	e1.4	5.8	9.9	12	11	7.5	5.3
6	1.1	1.1	e.84	e.78	e1.1	e1.4	5.2	8.8	12	11	7.5	5.3
7	1.1	1.1	e.86	e.84	e1.1	e1.5	4.5	16	12	11	7.5	5.2
8	1.1	1.0	e.86	e.84	e1.1	e1.6	4.0	14	11	11	7.3	5.0
9	1.0	1.0	e.86	e.84	e1.1	e1.7	3.9	10	11	10	7.2	5.0
10	1.1	1.0	e.86	e.84	e1.1	e1.8	4.3	10	12	10	7.2	5.0
11	1.1	1.2	e.84	e.80	e1.1	e1.9	4.6	13	14	10	7.0	5.0
12	1.1	1.1	e.80	e.84	e1.0	e2.0	4.6	16	15	10	6.9	5.0
13	1.0	1.1	e.80	e.88	e.94	e2.1	4.7	21	15	10	6.9	4.9
14	1.0	1.0	e.80	e.88	e.94	e2.2	4.3	26	14	9.8	6.9	4.8
15	1.0	1.0	e.80	e.88	e1.0	e2.4	4.0	28	16	9.6	6.7	4.8
16	1.0	1.0	e.80	e.88	e1.0	e2.7	3.9	29	16	9.6	6.6	4.8
17	1.0	1.0	e.84	e.88	e1.0	e3.0	4.4	28	16	9.5	6.6	4.8
18	1.0	1.0	e.80	e.88	e1.0	e3.4	6.5	24	14	9.3	6.5	4.8
19	1.0	1.0	e.80	e.88	e1.0	e3.9	6.0	25	14	9.1	6.3	4.8
20	1.0	1.0	e.80	e.88	e1.0	e4.5	5.4	29	14	9.0	6.3	4.7
21	1.0	1.1	e.80	e.88	e1.0	e5.2	5.4	31	14	9.0	6.3	4.6
22	1.1	e1.0	e.80	e.88	e1.0	e6.0	6.0	30	14	9.0	6.3	4.6
23	1.1	.91	e.80	e.86	e1.0	e7.0	7.1	25	14	8.8	6.2	4.6
24	1.1	e.91	e.80	e.86	e1.0	e8.0	6.9	24	13	8.7	6.1	4.5
25	1.1	e.91	e.80	e.86	e1.0	e9.7	5.9	27	12	8.6	6.1	4.3
26	1.0	.91	e.82	e.84	e.96	e11.5	6.1	27	12	8.4	6.1	4.3
27	1.0	.91	e.86	e.82	e.96	11	7.5	25	12	8.4	5.9	4.3
28	1.1	.91	e.92	e.80	e1.0	8.5	8.0	23	13	8.2	5.8	4.3
29	1.0	.87	e.86	e.86	---	7.0	8.6	21	12	8.1	5.8	4.2
30	1.1	.80	e.80	e.86	---	6.1	8.6	19	12	7.9	5.7	4.1
31	1.1	---	e.80	e.86	---	5.8	---	19	---	7.8	5.5	---
TOTAL	32.6	30.53	25.38	26.10	28.22	128.0	170.6	616.5	408	298.8	207.1	144.5
MEAN	1.05	1.02	.82	.84	1.01	4.13	5.69	19.9	13.6	9.64	6.68	4.82
MAX	1.1	1.3	.92	.88	1.1	11	8.6	31	18	12	7.8	5.5
MIN	1.0	.80	.76	.74	.90	1.1	3.9	7.7	11	7.8	5.5	4.1
AC-FT	65	61	50	52	56	254	338	1220	809	593	411	287

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1993, BY WATER YEAR (WY)

	MEAN	2.06	1.83	1.54	1.36	1.61	2.86	4.67	7.83	7.41	4.65	3.33	2.55
MAX	4.14	3.40	3.08	2.48	3.65	7.47	10.8	19.9	20.3	11.0	7.20	5.23	
(WY)	1987	1987	1987	1987	1986	1986	1986	1993	1986	1986	1986	1986	
MIN	1.00	1.02	.82	.84	.86	.90	1.83	1.89	2.28	1.64	1.32	1.04	
(WY)	1991	1993	1993	1993	1991	1991	1990	1990	1992	1990	1990	1990	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1986 - 1993

ANNUAL TOTAL	631.36	2116.33											
ANNUAL MEAN	1.73	5.80								3.48			
HIGHEST ANNUAL MEAN										7.83		1986	
LOWEST ANNUAL MEAN										1.51		1990	
HIGHEST DAILY MEAN	4.9	May 9				31	May 21			31	Jun 1	1986	
LOWEST DAILY MEAN	.76	Dec 3				.74	Jan 5			.74	Jan 5	1993	
ANNUAL SEVEN-DAY MINIMUM	.80	Nov 30				.78	Dec 31			.78	Dec 31	1992	
ANNUAL RUNOFF (AC-FT)	1250					4200				2520			
10 PERCENT EXCEEDS	3.3					14				7.3			
50 PERCENT EXCEEDS	1.3					4.4				2.2			
90 PERCENT EXCEEDS	.91					.84				1.0			

e Estimated

## TOOELE VALLEY

## 10172791 SETTLEMENT CREEK ABOVE RESERVOIR NEAR TOOELE, UT

LOCATION.--Lat 40°30'20", long 112°17'23", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, sec. 3, T. 4 S., R. 4 W., Tooele County, Hydrologic Unit 16020304, on right bank 0.2 mi upstream from road crossing at upstream end of reservoir.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,380 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 33 ft<sup>3</sup>/s May 21, 22, 26, 27, 1993; minimum daily discharge 0.21 ft<sup>3</sup>/s Sept. 27, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 33 ft<sup>3</sup>/s May 21, 22, 26, 27; minimum daily discharge, 0.42 ft<sup>3</sup>/s several days during December and February.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.70	1.1	.49	e.43	.43	.59	.99	e1.2	e23	e9.8	1.9	e1.2
2	e.68	1.2	.47	e.43	.42	.61	.96	e1.2	e21	e9.4	1.7	e1.2
3	e.66	1.1	.47	e.43	.42	.59	.75	e1.3	e20	e9.0	1.5	e1.2
4	e.64	.83	.47	e.43	.42	.59	.73	1.4	e19	e8.6	1.4	e1.2
5	e.64	.67	.47	e.43	.42	.59	.73	1.2	e18	e8.2	1.5	e1.2
6	e.62	.67	.47	e.43	.42	.59	.84	1.2	e17	e7.8	1.6	e1.2
7	e.62	.70	.47	e.43	.42	.59	.87	1.4	e16	e7.4	1.5	e1.2
8	e.66	.70	.42	e.43	.44	.60	.92	1.4	e15	e7.2	2.0	1.2
9	e.68	.64	.44	e.43	.47	.64	1.0	1.1	e14	e6.8	1.9	1.2
10	.74	.60	.47	e.43	.47	.62	1.0	1.1	e13	e6.5	1.6	1.2
11	.72	.60	.49	e.43	.46	.59	1.1	1.6	e13	e6.2	1.5	1.2
12	.73	.59	.52	e.43	.47	.56	1.2	3.1	e13	e5.9	1.4	1.3
13	.72	.57	.47	e.43	.47	.53	1.2	6.4	e12	e5.7	1.4	1.3
14	.86	.53	.47	e.43	.47	.53	1.3	9.3	e12	e5.3	1.3	1.2
15	.88	.48	.46	e.43	.47	.53	1.3	10	e11	e5.4	1.3	1.1
16	.92	.48	.42	e.43	.47	.55	1.2	12	e11	e5.2	1.4	1.2
17	.95	.52	.42	e.43	.47	.60	.97	19	e12	e5.0	1.4	1.3
18	.88	.52	.50	e.43	.47	.64	.99	22	e13	e5.0	e1.4	1.1
19	.93	.50	.50	.47	.49	.59	1.1	e24	e14	e4.9	e1.4	.83
20	.97	.51	.53	.47	.53	.59	1.2	e32	e15	4.8	e1.4	.82
21	1.0	.52	.53	.47	.55	.59	e1.2	e33	e16	4.8	e1.4	.95
22	1.2	.54	.53	.47	.59	.59	e1.2	e33	e15	4.7	e1.4	.76
23	1.4	.51	.50	.47	.59	.62	e1.2	e32	e14	5.1	e1.4	.69
24	1.5	.47	.47	.47	.59	.66	e1.2	e31	e13	4.8	e1.3	.66
25	1.6	.47	.47	.47	.56	.86	e1.2	e32	e13	4.5	e1.3	.65
26	1.6	.47	.47	.46	.53	1.4	e1.2	e33	e12	5.4	e1.3	.74
27	1.6	.48	e.45	.47	.53	1.7	e1.2	e33	e12	4.1	e1.3	.75
28	1.6	.50	e.44	.47	.55	2.0	e1.2	e29	e11	3.2	e1.3	.79
29	1.5	.51	e.43	.47	---	1.8	e1.2	e27	e11	2.9	e1.3	.85
30	1.6	.51	e.43	.47	---	1.2	e1.2	e26	e10	2.4	e1.2	1.2
31	1.2	---	e.43	.45	---	1.0	---	e24	---	2.1	e1.2	---
TOTAL	31.00	18.49	14.57	13.82	13.59	24.14	32.35	484.9	429	178.1	44.9	31.39
MEAN	1.00	.62	.47	.45	.49	.78	1.08	15.6	14.3	5.75	1.45	1.05
MAX	1.6	1.2	.53	.47	.59	2.0	1.3	33	23	9.8	2.0	1.3
MIN	.62	.47	.42	.43	.42	.53	.73	1.1	10	2.1	1.2	.65
AC-FT	61	37	29	27	27	48	64	962	851	353	89	62

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1993, BY WATER YEAR (WY)

	MEAN	.97	.86	.71	.65	.67	.82	1.03	5.39	7.09	2.72	1.49	.91
MAX	1.22	1.16	1.00	.96	.94	1.06	1.40	15.6	14.3	5.75	2.93	1.24	
(WY)	1990	1992	1989	1989	1989	1989	1989	1993	1993	1993	1991	1989	
MIN	.73	.62	.47	.45	.49	.62	.68	2.15	1.93	.63	.63	.52	
(WY)	1991	1993	1993	1993	1993	1991	1991	1990	1992	1992	1992	1991	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1989 - 1993

ANNUAL TOTAL	357.69	1316.25		
ANNUAL MEAN	.98	3.61	1.95	
HIGHEST ANNUAL MEAN			3.61	1993
LOWEST ANNUAL MEAN			1.05	1992
HIGHEST DAILY MEAN	3.8	May 21	33	May 21 1993
LOWEST DAILY MEAN	.22	Feb 3	.42	Dec 8 1991
ANNUAL SEVEN-DAY MINIMUM	.24	Jan 28	.42	Feb 1 1992
ANNUAL RUNOFF (AC-FT)	709	2610	1410	
10 PERCENT EXCEEDS	1.8	12	3.5	
50 PERCENT EXCEEDS	.75	.99	.97	
90 PERCENT EXCEEDS	.47	.46	.54	

e Estimated

## TOOELE VALLEY

273

10172795 BOX ELDER WASH NEAR GRANTSVILLE, UT

LOCATION.--Lat 40°29'42", long 112°31'52", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec. 4, T. 4 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on left bank 0.5 mi west of county road and 6.5 mi southwest of Grantsville.

DRAINAGE AREA.--9.84 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1986 to current year.

REVISED RECORDS.--WDR UT-89-1: 1988.

GAGE.--Water-stage recorder. Elevation of gage is 5,700 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2.0 ft<sup>3</sup>/s, many days in October 1987; minimum daily discharge, 0.08 ft<sup>3</sup>/s, many days in December 1990 and January 1991, several days in November 1992-March 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1.9 ft<sup>3</sup>/s, June 18, 19; minimum daily discharge, 0.08 ft<sup>3</sup>/s, several days in November-March.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.10	e.09	e.09	e.09	e.12	.10	.22	.44	1.6	1.4	.79
2	.16	.13	e.09	e.09	e.09	e.12	.10	.22	.54	1.6	1.4	.80
3	.16	.10	e.09	e.08	e.09	e.12	.10	.22	.59	1.6	1.4	.82
4	.16	.10	e.09	e.08	e.09	e.12	.10	.30	.51	1.6	1.4	.79
5	.15	.10	e.08	e.09	e.09	e.12	.10	.26	.58	1.6	1.4	.72
6	.14	.10	e.09	e.09	e.09	e.12	.10	.28	.66	1.6	1.4	.69
7	.14	.10	e.10	e.09	e.10	e.12	.11	.28	.55	1.6	1.4	.78
8	.14	.10	e.11	e.09	e.11	e.12	.11	.30	.53	1.7	1.4	.83
9	.13	.10	e.10	e.09	e.12	e.12	.11	.31	.79	1.7	1.4	1.1
10	.13	.11	e.09	e.09	e.12	e.12	.11	.30	1.2	1.7	1.3	.97
11	.13	.13	e.09	e.09	e.11	e.12	.11	.31	1.2	1.7	1.2	.94
12	.13	.11	e.09	e.09	e.10	e.12	.11	.31	1.2	1.7	1.1	.94
13	.13	.15	e.09	e.09	e.09	e.10	.11	.34	1.3	1.7	1.1	.94
14	.13	.08	e.09	e.09	e.08	e.10	.11	.38	1.3	1.7	1.1	.94
15	.13	.08	e.09	e.09	e.09	e.12	.13	.31	1.3	1.8	1.1	.94
16	.13	.08	e.09	e.09	e.09	e.12	.13	.36	1.3	1.8	1.1	.94
17	.12	.08	e.09	e.09	e.09	e.11	.13	.41	1.3	1.8	1.1	.94
18	.11	.09	e.09	e.09	e.09	e.11	.14	.43	1.3	1.9	1.1	.94
19	.11	.09	e.09	e.09	e.10	e.10	.15	.43	1.3	1.9	1.1	.94
20	.11	.12	e.09	e.09	e.11	e.10	.15	.41	1.4	1.8	1.1	.98
21	.11	.11	e.09	e.09	e.10	e.10	.15	.40	1.4	1.8	1.1	.95
22	.11	.11	e.09	e.09	e.09	e.10	.15	.41	1.4	1.7	1.1	.94
23	.11	.15	e.09	e.09	e.09	.09	.16	.39	1.4	1.7	1.1	.94
24	.10	e.10	e.09	e.09	e.08	.08	.17	.39	1.4	1.6	1.1	.94
25	.10	e.09	e.09	e.09	e.09	.08	.17	.39	1.4	1.5	.94	.94
26	.10	e.09	e.09	e.09	e.10	.08	.17	.39	1.4	1.4	.84	.94
27	.10	e.09	e.10	e.09	e.11	.09	.17	.39	1.5	1.4	.71	.94
28	.10	e.09	e.11	e.09	e.11	.10	.19	.39	1.6	1.4	.66	.94
29	.10	e.08	e.10	e.08	---	.14	.21	.47	1.7	1.4	.77	.94
30	.11	e.08	e.09	e.08	---	.11	.22	.48	1.7	1.4	.79	.94
31	.10	---	e.09	e.09	---	.10	---	.48	---	1.4	.79	---
TOTAL	3.85	3.04	2.86	2.75	2.71	3.37	4.07	10.96	34.19	50.8	34.90	27.14
MEAN	.12	.10	.092	.089	.097	.11	.14	.35	1.14	1.64	1.13	.90
MAX	.17	.15	.11	.09	.12	.14	.22	.48	1.7	1.9	1.4	1.1
MIN	.10	.08	.08	.08	.08	.08	.10	.22	.44	1.4	.66	.69
AC-FT	7.6	6.0	5.7	5.5	5.4	6.7	8.1	22	68	101	69	54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1993, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993
MEAN	.57	.51	.45	.43	.39	.38	.36
MAX	1.95	1.85	1.64	1.60	1.33	1.09	.91
(WY)	1987	1987	1987	1987	1987	1987	1987
MIN	.12	.10	.092	.088	.097	.11	.14
(WY)	1993	1993	1993	1991	1993	1993	1991

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1987 - 1993

ANNUAL TOTAL	64.53	180.64	
ANNUAL MEAN	.18	.49	
HIGHEST ANNUAL MEAN			.50
LOWEST ANNUAL MEAN			1.28
HIGHEST DAILY MEAN	.33 Jul 1	1.9 Jul 18	.20 1987
LOWEST DAILY MEAN	.08 Nov 14	.08 Nov 14	2.0 Oct 1 1986
ANNUAL SEVEN-DAY MINIMUM	.09 Nov 29	.09 Nov 29	.08 Dec 18 1990
ANNUAL RUNOFF (AC-FT)	128	358	.08 Dec 18 1990
10 PERCENT EXCEEDS	.24	1.4	361
50 PERCENT EXCEEDS	.17	.13	1.1
90 PERCENT EXCEEDS	.09	.09	.32

e Estimated

## TOOELE VALLEY

10172800 SOUTH WILLOW CREEK NEAR GRANTSVILLE, UT

LOCATION.--Lat 40°29'47", long 112°34'25", in SW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 6, T. 4 S., R. 6 W., Tooele County, Hydrologic Unit 16020304, on right bank 200 ft upstream from Forest Service Guard Station, 1.7 mi above Wasatch National Forest boundary, 9.2 mi southwest of Grantsville, and 14.8 mi west of Tooele.

DRAINAGE AREA.--4.19 mi<sup>2</sup>. Area at crest-stage gage site, 3.26 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1963 to current year. Annual maximum only, July 1960 to July 1963, at crest-stage gage site.

REVISED RECORDS.--WDR UT-83-1: 1982.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,360 ft above sea level, from topographic map. Prior to July 23, 1963, crest-stage gage only, at site 1.4 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92 ft<sup>3</sup>/s June 8, 1964, gage height, 2.27 ft; minimum daily discharge, 1.4 ft<sup>3</sup>/s Jan. 5, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
--	--	unknown	unknown				

Maximum discharge observed, 39 ft<sup>3</sup>/s May 26, gage height, 1.65 ft.  
Minimum daily discharge, 1.4 ft<sup>3</sup>/s Jan. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.9	e1.8	e1.7	e1.7	e2.1	6.8	9.5	e34	e12	7.1	4.5
2	1.7	2.9	e1.7	e1.7	e1.9	e2.1	10	10	e31	e12	7.1	4.2
3	1.7	2.3	e1.6	e1.6	e1.8	e2.2	6.7	11	e29	e11	7.1	4.2
4	1.7	2.2	e1.5	e1.5	e1.6	e2.3	6.6	12	e27	e11	7.1	4.2
5	1.7	2.2	e1.7	e1.4	e1.6	e2.2	6.4	13	e25	e10	7.1	4.2
6	1.8	2.1	e1.6	e1.6	e1.8	2.4	6.4	12	e24	e10	7.1	4.2
7	1.9	2.0	e1.7	e1.7	e1.9	2.4	6.2	12	e23	e9.5	7.1	4.2
8	1.9	2.0	e1.9	e1.6	e2.0	2.5	6.2	13	e22	e9.3	7.1	4.1
9	1.9	2.0	e1.9	e1.7	2.2	2.9	6.2	13	e21	e9.0	6.9	3.9
10	1.9	2.0	e1.8	e1.7	2.2	3.2	5.9	15	e19	e8.9	6.6	3.9
11	2.0	2.0	e1.8	e1.6	2.2	3.4	5.8	16	e18	e8.8	6.6	3.6
12	2.0	2.0	e1.7	e1.5	e2.0	3.5	5.7	19	e20	e8.8	6.6	3.6
13	2.0	2.0	e1.7	e1.6	e1.7	3.7	5.4	e22	e22	8.8	6.6	3.6
14	2.0	1.9	e1.6	e1.5	e1.5	3.8	5.4	e25	e23	8.7	6.2	3.6
15	2.0	1.9	e1.5	e1.7	e1.6	3.7	5.4	e28	e23	8.7	5.7	3.6
16	2.0	1.9	e1.5	e1.7	e1.8	3.7	5.2	e28	e24	8.7	5.7	3.6
17	2.0	1.9	e1.7	e1.6	e1.8	4.2	5.0	e29	e24	8.7	5.7	3.8
18	2.0	1.9	e1.6	e1.7	e1.8	4.9	5.0	e31	e25	8.2	5.7	3.6
19	2.0	1.9	e1.6	e1.6	2.4	4.4	5.0	e31	e23	8.0	5.3	3.6
20	2.0	1.9	e1.5	e1.6	e2.2	4.5	5.0	e32	e21	7.6	5.3	3.6
21	2.0	e1.8	e1.7	1.8	e2.0	5.0	5.3	e35	e19	7.6	5.3	3.6
22	2.0	1.9	e1.7	2.0	e2.2	5.0	5.5	e38	e18	7.6	5.2	3.6
23	2.0	e1.8	e1.7	e1.7	e2.2	5.0	6.1	e39	e17	7.8	4.9	3.6
24	2.0	e1.7	e1.6	e1.8	e2.1	5.0	6.8	e39	e16	7.6	4.9	3.6
25	2.1	e1.7	e1.6	e1.6	e1.9	5.4	7.2	e39	e15	7.6	4.9	3.6
26	2.0	e1.7	e1.6	e1.7	e1.7	6.4	7.2	e41	e14	7.6	4.8	3.6
27	2.3	e1.8	e1.6	e1.7	e1.9	7.2	7.2	e40	e14	7.6	4.6	3.6
28	2.0	e1.6	e1.8	e1.7	e2.1	7.7	7.5	e40	e13	7.6	4.6	3.6
29	2.1	e1.6	e1.8	e1.7	---	7.8	7.8	e39	e13	7.6	4.6	3.6
30	2.3	e1.7	e1.7	e1.5	---	7.7	8.8	e37	e12	7.6	4.6	3.6
31	2.1	---	e1.6	e1.6	---	7.3	---	e36	---	7.1	4.6	---
TOTAL	60.8	58.2	51.8	51.1	53.8	133.6	186.4	804.5	629	271.0	182.7	113.8
MEAN	1.96	1.94	1.67	1.65	1.92	4.31	6.21	26.0	21.0	8.74	5.89	3.79
MAX	2.3	2.9	1.9	2.0	2.4	7.8	8.8	41	34	12	7.1	4.5
MIN	1.7	1.6	1.5	1.4	1.5	2.1	3.0	9.5	12	7.1	4.6	3.6
AC-FT	121	115	103	101	107	265	370	1600	1250	538	362	226

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1993, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	3.57	3.33	2.99	2.90	2.90	3.52	6.31	16.0	18.7	9.42	5.16	4.13																		
MAX	7.59	6.57	5.79	5.61	5.84	7.12	11.9	40.0	46.0	24.6	12.6	9.54																		
(WY)	1984	1985	1985	1984	1984	1986	1984	1984	1984	1984	1984	1982																		
MIN	1.71	1.70	1.64	1.50	1.54	1.53	2.42	4.38	4.00	2.55	1.91	1.71																		
(WY)	1991	1991	1991	1991	1991	1991	1967	1977	1992	1992	1992	1992																		

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1964 - 1993

ANNUAL TOTAL	1123.2	2596.7	6.59
ANNUAL MEAN	3.07	7.11	14.9
HIGHEST ANNUAL MEAN			3.03
LOWEST ANNUAL MEAN			84
HIGHEST DAILY MEAN	11	May 13	41
LOWEST DAILY MEAN	1.5	Dec 4	1.4
ANNUAL SEVEN-DAY MINIMUM	1.6	Dec 14	1.6
ANNUAL RUNOFF (AC-FT)	2230	5150	4780
10 PERCENT EXCEEDS	5.8	20	15
50 PERCENT EXCEEDS	2.2	3.7	3.8
90 PERCENT EXCEEDS	1.7	1.7	2.2

e Estimated

## GREAT SALT LAKE DESERT

275

10172870 TROUT CREEK NEAR CALLAO, UT

LOCATION.--Lat 39°44'39", long 113°53'21", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 28, T. 12 S., R. 18 W., Juab County, Hydrologic Unit 16020306, on left bank 2.9 mi upstream from Birch Creek and 14 mi southwest of Callao.

DRAINAGE AREA.--8.19 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1958 to current year. Monthly discharge only for October and November 1958, published in WSP 1734.

REVISED RECORDS.--WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 177 ft<sup>3</sup>/s June 2, 1983, gage height, 2.84 ft, maximum gage height, 3.00 ft, May 15, 1973; minimum, 0.24 ft<sup>3</sup>/s Feb. 25, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 22	0015	*52	*2.20	No other peak greater than base discharge.			

Maximum discharge observed, 54 ft<sup>3</sup>/s May 26, gage height 2.19 ft.

Minimum daily discharge, 0.52 ft<sup>3</sup>/s Feb. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	1.3	e1.2	e1.4	e1.0	e1.0	4.3	7.6	31	6.0	3.0	1.7
2	.94	e1.3	e1.2	e1.4	e.94	e1.1	4.3	7.5	29	5.6	2.9	1.7
3	1.0	e1.3	e1.1	e1.1	e1.4	1.3	4.1	8.0	25	5.5	2.9	1.7
4	1.1	1.4	1.1	e1.0	e1.4	1.3	4.0	12	22	5.4	3.0	1.6
5	1.1	1.4	e1.0	e.90	e1.5	1.5	4.0	11	20	5.2	3.0	1.6
6	1.1	1.3	.96	e1.2	e1.1	1.7	3.8	10	18	4.8	2.9	1.6
7	1.1	1.3	e1.1	e1.3	e1.1	2.1	3.5	9.1	17	4.6	2.8	1.5
8	1.1	1.3	e1.1	e1.2	e.71	2.4	3.5	8.4	15	4.4	2.7	1.5
9	1.1	1.3	e1.2	e1.4	.52	2.6	3.5	7.6	14	4.2	2.7	1.5
10	1.1	e1.3	e1.1	e1.4	.57	2.7	3.5	7.6	13	3.9	2.7	1.5
11	1.1	e1.2	e1.1	e1.1	1.1	2.8	3.7	10	14	3.8	2.3	1.5
12	1.1	1.4	e1.2	e1.2	e1.5	2.6	3.7	18	16	3.7	2.1	1.5
13	1.0	1.3	e1.3	e1.3	e1.9	2.6	3.5	28	18	3.6	2.0	1.6
14	1.1	1.3	e1.4	e1.2	e1.5	2.7	3.5	33	18	3.5	2.0	1.6
15	1.1	1.3	1.4	e1.4	e2.1	2.7	3.5	39	19	3.4	2.0	1.5
16	1.1	1.3	1.3	e1.4	e2.1	2.8	3.5	38	20	3.4	2.0	1.7
17	1.1	1.3	1.3	e1.3	e1.8	3.4	3.8	37	19	3.2	2.0	1.8
18	1.1	1.3	1.4	e1.4	e1.5	4.0	4.6	41	17	3.3	1.9	2.1
19	1.1	1.3	1.3	e1.4	e1.2	3.7	4.6	40	15	3.2	1.9	1.9
20	1.1	e1.3	e1.2	e1.3	e1.2	3.7	4.4	43	14	3.1	2.0	1.7
21	1.2	e1.2	e1.2	e1.4	e1.4	3.9	4.8	51	13	3.0	2.0	1.7
22	1.3	e1.2	e1.3	e1.4	e1.5	4.3	5.7	51	13	3.0	1.9	1.7
23	1.3	1.3	e1.3	e1.6	e1.2	4.5	6.0	49	12	3.1	1.9	1.7
24	1.3	e1.1	e1.2	e1.2	e1.2	5.1	5.4	49	11	3.2	1.8	1.6
25	1.3	e1.0	e1.2	e1.3	e1.5	4.6	5.0	50	9.7	3.1	1.8	1.6
26	1.3	e1.1	e1.3	1.4	e1.6	4.3	5.5	50	8.3	3.0	1.9	1.6
27	1.3	e1.4	e1.4	1.3	e1.0	4.3	6.2	47	7.5	3.0	1.8	1.6
28	1.3	e1.2	e1.4	1.3	e1.0	4.5	6.7	44	7.0	3.0	1.8	1.6
29	1.3	e1.1	e1.3	e1.0	---	4.4	7.5	39	6.6	3.0	1.8	1.5
30	1.4	e1.1	e1.2	e.94	---	4.3	8.1	35	6.2	3.0	1.8	1.5
31	1.4	---	e1.2	e1.0	---	4.3	---	33	---	3.0	1.7	---
TOTAL	35.86	37.9	37.96	39.14	36.54	97.2	138.2	913.8	468.3	117.2	69.0	48.9
MEAN	1.16	1.26	1.22	1.26	1.30	3.14	4.61	29.5	15.6	3.78	2.23	1.63
MAX	1.4	1.4	1.4	1.6	2.1	5.1	8.1	51	31	6.0	3.0	2.1
MIN	.92	1.0	.96	.90	.52	1.0	3.5	7.5	6.2	3.0	1.7	1.5
AC-FT	71	75	75	78	72	193	274	1810	929	232	137	97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1993, BY WATER YEAR (WY)

MEAN	2.18	2.07	1.78	1.65	1.70	2.15	5.06	18.1	21.9	5.76	2.65	2.05
MAX	8.59	4.96	3.29	3.31	3.35	5.04	11.1	59.2	95.4	19.9	6.55	5.37
(WY)	1983	1983	1983	1983	1983	1983	1962	1984	1983	1983	1965	1965
MIN	1.16	1.26	1.04	.96	1.02	1.09	1.34	3.44	3.66	1.49	.98	.93
(WY)	1993	1991	1991	1960	1960	1991	1991	1989	1959	1959	1959	1992

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1960 - 1993

ANNUAL TOTAL	1067.91	2040.00	5.70	
ANNUAL MEAN	2.92	5.59	16.3	1983
HIGHEST ANNUAL MEAN			2.07	1989
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	21	51	156	Jun 1 1983
LOWEST DAILY MEAN	.81	.52	.52	Feb 9 1993
ANNUAL SEVEN-DAY MINIMUM	.85	.94	.83	Aug 25 1960
ANNUAL RUNOFF (AC-FT)	2120	4050	4130	
10 PERCENT EXCEEDS	6.7	14	13	
50 PERCENT EXCEEDS	1.4	1.8	2.1	
90 PERCENT EXCEEDS	1.0	1.1	1.3	

e Estimated

## TRIBUTARIES BETWEEN GREAT SALT LAKE DESERT AND BEAR RIVER

10172952 DUNN CREEK NEAR PARK VALLEY, UT

LOCATION.--Lat 41°51'31", long 113°19'35", in NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 15, T. 13 N., R. 13 W., Box Elder County, Hydrologic Unit 16020308, on right bank 150 ft upstream from diversion structure, 200 ft downstream from confluence of left hand and right hand forks, and 2.9 mi north of Park Valley.

DRAINAGE AREA.--8.72 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1971 to September 1973, October 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,250 ft above sea level, from topographic map. Prior to Aug. 26, 1982 at site 110 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversion for flood-flows, located approximately 300 ft upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 150 ft<sup>3</sup>/s May 28, 1983; minimum discharge, 0.14 ft<sup>3</sup>/s Mar. 17, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 72 ft<sup>3</sup>/s May 21, gage height, 1.83 ft; minimum daily discharge, 0.65 ft<sup>3</sup>/s Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	.88	.75	e.98	e1.0	1.3	5.6	6.3	34	11	5.2	2.7
2	.65	1.4	.76	e1.0	e1.05	1.2	5.3	6.4	31	11	5.1	2.6
3	.80	.89	.80	e.94	e1.03	1.2	5.1	6.9	25	11	5.0	2.6
4	.76	.84	e.90	e.84	e1.0	1.2	5.1	7.2	20	11	5.1	2.7
5	.76	.86	e.70	e.80	e1.03	1.2	4.8	7.3	20	10	5.6	2.6
6	.73	.85	e.78	e.96	e1.08	1.3	4.6	7.3	20	9.6	5.2	2.5
7	.74	.83	e.84	e1.0	e1.05	1.3	4.4	7.2	20	9.2	5.4	2.4
8	.73	.83	e.74	e.98	e1.05	1.3	4.5	7.0	18	8.8	5.0	2.3
9	.71	.77	e.66	e.94	e1.1	1.5	4.4	6.9	17	8.5	4.6	2.3
10	.72	.78	e.71	e.88	e1.1	1.6	4.2	6.9	17	8.3	4.5	2.2
11	.71	.80	e.70	e.90	e1.1	1.6	4.1	7.6	19	8.2	5.4	2.2
12	.70	.80	e.78	e.88	e1.0	1.4	3.9	9.3	22	8.1	4.5	2.1
13	.70	.79	e.90	e.92	e1.0	1.3	3.9	14	22	7.9	4.4	2.3
14	.70	.80	e1.0	e.94	e1.0	1.4	3.9	23	22	7.8	4.2	2.2
15	.70	.79	e1.05	e1.0	e1.0	1.4	4.0	37	24	7.7	4.1	2.1
16	.70	.80	e.95	e.98	e1.0	1.5	4.3	40	24	7.7	4.2	2.1
17	.70	.80	e1.0	e.94	e1.0	1.2	4.5	39	22	7.3	4.0	2.5
18	.70	.80	e.90	e.95	e1.0	3.8	4.7	42	20	7.0	3.8	2.6
19	.70	.76	e.90	e1.01	e1.09	3.5	4.4	46	20	6.7	3.6	2.3
20	.70	.76	e.76	e.96	e1.1	4.1	4.6	50	21	6.5	3.8	2.2
21	.70	.84	e.78	e1.0	e1.08	4.0	4.9	60	21	6.7	4.2	2.0
22	.79	.84	e1.08	e1.08	e1.08	4.1	5.1	49	20	6.7	3.7	2.0
23	.73	.81	e.98	e.88	e1.1	4.7	5.0	44	18	6.6	3.5	1.9
24	.72	.80	e.84	e1.0	e1.1	6.2	5.1	41	16	6.7	3.3	1.9
25	.73	.80	e.84	e.90	e1.1	6.7	5.0	46	14	6.4	3.2	1.9
26	.73	.79	e1.0	e.90	e1.1	6.9	5.5	56	14	6.3	3.1	1.9
27	.80	.78	e1.04	e.96	1.2	7.1	5.5	50	14	6.0	3.0	1.8
28	.87	.75	e1.10	e.96	1.2	6.6	5.7	42	14	5.8	2.9	1.8
29	1.4	.73	e.94	e.96	---	6.2	6.0	41	13	5.7	2.9	1.7
30	1.3	.75	e.90	e.88	---	5.8	6.2	36	12	5.5	2.8	1.7
31	.93	---	e.92	e.92	---	5.6	---	36	---	5.3	2.7	---
TOTAL	23.97	24.72	26.82	29.24	29.74	101.4	144.2	878.3	594	242.0	128.0	66.1
MEAN	.77	.82	.87	.94	1.06	3.27	4.81	28.3	19.8	7.81	4.13	2.20
MAX	1.4	1.4	1.1	1.1	1.2	7.1	6.2	60	34	11	5.6	2.7
MIN	.65	.73	.66	.80	1.0	1.2	3.8	6.3	12	5.3	2.7	1.7
AC-FT	48	49	53	58	59	201	286	1740	1180	480	254	131

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1993, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	1.86	1.55	1.38	1.30	1.44	2.49	5.85	18.6	19.4	6.99	3.48	2.24										
MAX	3.64	2.45	2.09	2.04	2.82	6.33	16.4	38.0	57.3	17.9	8.45	4.58										
(WY)	1985	1983	1983	1980	1986	1986	1986	1980	1983	1983	1984	1984										
MIN	.77	.81	.73	.78	.84	.85	1.15	3.40	3.13	1.29	.76	.76										
(WY)	1993	1977	1977	1977	1977	1977	1991	1977	1992	1992	1992	1992										

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1972 - 1993

	1992	1993	1972-1993
ANNUAL TOTAL	734.63	2288.49	
ANNUAL MEAN	2.01	6.27	5.56
HIGHEST ANNUAL MEAN			12.0
LOWEST ANNUAL MEAN			2.00
HIGHEST DAILY MEAN	12	May 7	150
LOWEST DAILY MEAN	.63	Aug 28	.50
ANNUAL SEVEN-DAY MINIMUM	.66	Aug 24	.66
ANNUAL RUNOFF (AC-FT)	1460		4030
10 PERCENT EXCEEDS	4.9		13
50 PERCENT EXCEEDS	1.0		2.0
90 PERCENT EXCEEDS	.70		1.0

e Estimated



## SEVIER LAKE BASIN

277

10173450 MAMMOTH CREEK ABOVE WEST HATCH DITCH, NEAR HATCH, UT

LOCATION.--Lat 37°37'19", long 112°30'58", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 3, T. 37 S., R. 6 W., Garfield County, Hydrologic Unit 16030001, on left bank 0.5 mi upstream from West Hatch ditch diversion, 2 mi upstream from Spring Hollow, 4.5 mi upstream from mouth, and 5 mi southwest of Hatch.

DRAINAGE AREA.--105 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,300 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. One small diversion for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 838 ft<sup>3</sup>/s, June 19, 1983, gage height, 5.13 ft, from rating extended above 640 ft<sup>3</sup>/s, minimum recorded, 0.06 ft<sup>3</sup>/s, Dec. 25, 1977, Jan. 1, 22, 1978, result of ice jam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 28	0300	*551	*4.75	Aug. 20	1630	384	3.97

Minimum daily discharge, 9.2 ft<sup>3</sup>/s, Mar. 13.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	e13	e15	e14	e12	13	113	458	150	58	40
2	11	15	e13	e16	e13	e12	14	119	452	144	58	38
3	11	17	e13	e15	e12	e10	14	125	445	136	58	37
4	12	e16	e13	e14	e12	e10	15	153	425	126	57	36
5	12	e16	e13	e15	e12	e10	16	148	425	126	55	35
6	12	e16	e12	e16	e12	e9.8	15	139	431	120	53	35
7	12	e17	e12	e17	e13	e10	15	133	410	111	52	35
8	11	e16	e15	e17	e13	e11	15	125	398	107	54	34
9	11	e16	e14	e16	e13	11	16	113	389	104	54	34
10	11	e16	e14	e16	e13	11	16	114	379	100	53	33
11	11	e15	e14	e16	e12	10	17	138	368	96	50	32
12	11	e17	e15	e17	e12	9.4	18	187	367	93	48	32
13	11	e18	e14	e18	e13	9.2	18	244	360	91	47	32
14	11	e18	e14	e15	e12	9.3	18	345	350	87	46	33
15	11	e17	e15	e14	e11	9.8	18	381	340	84	46	33
16	11	e17	e16	e14	e11	9.9	19	401	332	83	45	32
17	11	e17	e16	e14	e12	11	23	451	331	81	44	32
18	11	e17	e17	e15	e11	e12	27	451	316	80	44	32
19	11	e17	e17	e15	e13	12	28	437	290	78	43	32
20	11	e17	e14	e14	e14	10	27	451	265	77	76	31
21	11	e18	e13	e13	e13	10	31	475	237	75	51	31
22	11	e18	e13	e13	e13	10	37	481	219	73	45	30
23	11	e17	e14	e15	e12	11	44	475	210	71	43	30
24	18	e14	e14	e14	e11	12	48	486	211	71	42	30
25	15	e13	e14	e14	e12	13	51	491	193	69	41	29
26	12	e13	e14	e13	e12	14	59	501	184	66	41	29
27	11	e13	e14	e12	e12	13	74	501	173	65	41	28
28	11	e13	e16	e12	e12	12	90	498	167	63	40	28
29	12	e13	e16	e13	---	11	104	472	163	62	44	28
30	12	e13	e15	e14	---	11	112	473	155	61	43	27
31	14	---	e14	e15	---	12	---	470	---	60	42	---
TOTAL	363	473	441	457	345	338.4	1012	10091	9443	2810	1514	968
MEAN	11.7	15.8	14.2	14.7	12.3	10.9	33.7	326	315	90.6	48.8	32.3
MAX	18	18	17	18	14	14	112	501	458	150	76	40
MIN	11	13	12	12	11	9.2	13	113	155	60	40	27
AC-FT	720	938	875	906	684	671	2010	20020	18730	5570	3000	1920

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1993, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
MEAN	20.7	17.4	14.0	11.7	11.5	12.6	29.8	179	175	58.8	33.7	25.2																		
MAX	56.8	44.5	34.9	24.2	23.0	24.7	75.4	373	616	284	105	65.1																		
(WY)	1984	1984	1984	1984	1973	1973	1985	1969	1983	1983	1983	1983																		
MIN	4.35	3.98	4.39	2.91	3.36	4.28	6.19	9.69	12.5	10.3	7.60	5.64																		
(WY)	1978	1978	1978	1978	1978	1991	1991	1977	1977	1977	1977	1977																		

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1965 - 1993

ANNUAL TOTAL	11478.8	28255.4	49.3
ANNUAL MEAN	31.4	77.4	112
HIGHEST ANNUAL MEAN			9.99
LOWEST ANNUAL MEAN			1983
HIGHEST DAILY MEAN	224	501	720
LOWEST DAILY MEAN	2.5	9.2	1.1
ANNUAL SEVEN-DAY MINIMUM	2.5	9.8	1.9
ANNUAL RUNOFF (AC-FT)	22770	56040	35700
10 PERCENT EXCEEDS	107	300	119
50 PERCENT EXCEEDS	14	17	19
90 PERCENT EXCEEDS	5.2	11	7.5

e Estimated

## SEVIER LAKE BASIN

10174500 SEVIER RIVER AT HATCH, UT

LOCATION.--Lat 37°39'04", long 112°25'46", in SW<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 28, T. 36 S., R. 5 W., Garfield County, Hydrologic Unit 16030001, on right bank at highway bridge, 0.2 mi east of Hatch, and 2.8 mi downstream from Mammoth Creek.

DRAINAGE AREA.--340 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1911 to September 1928, June 1939 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Hatchtown" 1911 and as "near Hatch" 1912.

REVISED RECORDS.--WSP 960: 1939-40. WSP 1284: 1916. WSP 1564: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,870 ft above sea level, from river-profile map. See WSP 1734 for history of changes prior to Oct. 4, 1949. Relocated at present site Aug. 22, 1978.

REMARKS.--Records good except those for Apr. 10 to June 30, which are fair, and estimated daily discharges, which are poor. Small diversions for irrigation above station. No regulation since Hatchtown Dam failed in 1914.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, occurred May 25, 1914, when Hatchtown Dam failed; maximum recorded, 1,490 ft<sup>3</sup>/s, May 26, 1922, gage height, 5.25 ft, datum then in use; minimum daily, 10 ft<sup>3</sup>/s for several days in 1912 when water was stored in Hatchtown Reservoir. Minimum natural daily discharge, 21 ft<sup>3</sup>/s, Sept. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 17	0900	*1,220	*3.98	No other peaks greater than base discharge.			
Minimum daily, 43 ft <sup>3</sup> /s, Oct. 2, Dec. 21, 31.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	63	51	e45	48	48	118	543	879	248	136	118
2	43	59	53	e47	47	47	131	561	859	253	134	113
3	44	59	54	e46	47	47	129	569	842	267	134	111
4	44	58	52	e45	e47	47	141	627	787	248	136	108
5	45	58	53	e50	e47	47	157	612	762	250	131	107
6	45	58	e49	e52	47	48	153	574	779	241	131	109
7	46	61	50	e54	47	48	145	560	737	226	130	107
8	46	60	55	53	50	49	153	548	688	224	133	105
9	46	60	54	50	49	50	163	510	659	221	133	99
10	47	60	52	51	48	51	182	482	635	216	135	100
11	46	57	52	53	47	50	194	537	601	210	129	99
12	50	61	53	e54	47	49	202	591	589	206	125	97
13	50	61	e48	55	47	49	187	685	583	201	121	96
14	49	60	e45	51	e47	50	174	856	560	196	118	93
15	49	59	e47	51	47	52	177	911	534	185	117	94
16	50	58	e48	51	47	54	187	967	501	183	115	95
17	49	58	e48	52	47	57	209	1150	501	181	114	96
18	50	58	e49	53	47	62	270	1140	485	179	114	97
19	50	58	e50	51	52	66	287	1110	441	176	113	98
20	50	57	e44	51	e54	67	278	1100	409	172	152	98
21	51	e58	e43	49	e55	69	282	1100	370	167	141	97
22	50	59	e46	49	e50	73	312	1090	338	162	120	97
23	50	56	e47	51	47	75	341	1040	324	160	117	95
24	53	e56	e47	e49	48	82	371	1020	322	157	118	94
25	98	e55	e47	e48	48	89	364	1010	293	153	113	96
26	62	e53	e47	e47	47	101	397	1010	291	150	114	95
27	59	e51	e48	e47	48	100	434	1010	276	145	126	96
28	58	54	e55	e48	49	87	520	1010	268	142	123	95
29	59	54	e55	e49	---	97	579	959	266	137	122	95
30	61	52	e48	49	---	103	537	953	256	137	132	94
31	71	---	e43	50	---	109	---	928	---	136	122	---
TOTAL	1615	1731	1533	1551	1351	2023	7774	25763	15835	5929	3899	2994
MEAN	52.1	57.7	49.5	50.0	48.2	65.3	259	831	528	191	126	99.8
MAX	98	63	55	55	55	109	579	1150	879	267	152	118
MIN	43	51	43	45	47	47	118	482	256	136	113	93
AC-FT	3200	3430	3040	3080	2680	4010	15420	51100	31410	11760	7730	5940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1993, BY WATER YEAR (WY)

	MEAN	67.6	66.4	61.3	55.7	59.2	65.8	115	307	244	110	83.6	71.5
MAX	152	129	108	101	105	106	285	831	1071	430	228	154	154
(WY)	1984	1984	1984	1984	1962	1962	1942	1993	1983	1983	1983	1983	1983
MIN	36.8	36.9	36.2	37.1	36.6	38.5	44.0	40.8	44.2	38.1	30.4	28.3	28.3
(WY)	1978	1978	1957	1991	1978	1957	1957	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1940 - 1993
ANNUAL TOTAL	27433	71998	
ANNUAL MEAN	75.0	197	109
HIGHEST ANNUAL MEAN			251
LOWEST ANNUAL MEAN			42.6
HIGHEST DAILY MEAN	275	1150	1340
LOWEST DAILY MEAN	43	43	21
ANNUAL SEVEN-DAY MINIMUM	44	44	23
ANNUAL RUNOFF (AC-FT)	54410	142800	79070
10 PERCENT EXCEEDS	161	576	206
50 PERCENT EXCEEDS	55	95	68
90 PERCENT EXCEEDS	46	47	44

e Estimated

## 279

LOCATION.--Lat 38°06'15", long 112°20'08", in NE<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 20, T. 31 S., R. 4 W., Garfield County, Hydrologic Unit 16030001, on left bank 2 mi upstream from Pine Creek and 6 mi southwest of Circleville.

PERIOD OF RECORD.--May to September 1912, April 1914 to September 1927 (fragmentary 1923, 1925-27), October 1949 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WSP 1180: 1922 (M). WSP 1314: 1916. WRD UT-75-1: 1969. WDR UT-78-1: Drainage area. WDR  
UT-83-1: 1972 (M).

GAGE.--Water-stage recorder. Elevation of gage is 6,240 ft above sea level, from river-profile map. May 10 to Sept. 19, 1912, nonrecording gage at site 300 ft upstream at different datum. Apr. 23, 1914 to Sept. 30, 1927, and Nov. 21, 1949 to Aug. 6, 1954, water-stage recorder at site 300 ft upstream at datum 0.23 ft higher.

REMARKS.--Records good except those for Feb. 24 to May 7, June 23-30, and estimated daily discharges, which are poor. Many diversions above and below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft<sup>3</sup>/s Dec. 26, 1971, June 2, 1983, gage height, 7.06 ft; maximum gage height, 9.80 ft, May 21, 1922, site and datum then in use; minimum daily, 18 ft<sup>3</sup>/s June 30, July 1, 5, 1960, June 23, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1938 may have exceeded that of June 2, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft<sup>3</sup>/s, May 18 at 0900 hrs, gage height, 4.88 ft; minimum daily discharge, 39 ft<sup>3</sup>/s, Oct. 6.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	108	110	103	112	123	261	602	792	244	110	119
2	42	98	111	109	112	118	288	584	773	219	108	117
3	43	99	110	105	106	117	273	582	758	209	110	111
4	43	94	109	96	101	122	280	592	739	209	116	109
5	41	91	114	115	101	132	298	643	707	200	126	101
6	39	90	107	120	97	170	273	599	748	204	121	98
7	49	91	108	109	112	212	225	551	e700	194	127	100
8	59	93	114	115	116	210	247	497	e660	186	189	94
9	53	98	115	112	128	194	254	464	e600	180	127	95
10	54	96	115	110	129	188	257	434	e575	172	133	87
11	54	94	118	110	124	195	255	418	e540	163	133	85
12	46	104	120	98	121	207	274	471	e510	163	113	85
13	47	123	109	106	112	168	263	548	e490	162	105	83
14	49	109	107	112	104	169	243	616	e485	155	102	79
15	52	109	e102	114	109	170	238	742	e475	145	98	75
16	50	128	104	116	110	195	223	784	e470	138	97	78
17	52	125	113	124	114	198	241	908	e460	135	98	86
18	48	123	111	133	110	215	299	1050	e450	134	98	96
19	49	127	107	127	178	244	362	1030	e435	134	96	98
20	49	124	100	114	315	238	391	1000	e400	138	99	90
21	45	115	e100	113	191	227	413	991	e360	131	144	92
22	47	123	e98	115	148	228	418	980	e330	130	126	91
23	47	123	e98	109	134	236	436	969	322	129	109	97
24	53	113	e100	102	137	254	460	942	301	137	104	98
25	111	110	e102	98	127	257	464	926	290	136	122	99
26	103	110	e104	98	119	273	473	920	282	128	218	107
27	81	119	e106	101	120	287	510	903	280	131	124	108
28	76	113	107	101	122	283	551	897	269	131	129	105
29	80	115	103	101	---	262	583	868	252	124	120	100
30	79	113	106	103	---	253	618	822	241	122	112	101
31	118	---	103	102	---	246	---	807	---	113	124	---
TOTAL	1799	3278	3331	3391	3609	6391	10371	23140	14694	4896	3738	2884
MEAN	58.0	109	107	109	129	206	346	746	490	158	121	96.1
MAX	118	128	120	133	315	287	618	1050	792	244	218	119
MIN	39	90	98	96	97	117	223	418	241	113	96	75
AC=FT	3570	6500	6610	6730	7160	12680	20570	45900	29150	9710	7410	5720

MEAN	93.7	120	122	111	123	130	138	249	198	88.2	81.7	79.4
MAX	233	221	226	185	192	206	346	770	1193	420	295	189
(WY)	1984	1984	1984	1984	1980	1993	1993	1983	1983	1983	1983	1967
MIN	37.9	68.3	86.4	73.4	85.9	68.7	41.3	35.4	24.8	22.7	24.8	28.9
(WY)	1956	1957	1952	1992	1964	1957	1956	1977	1960	1955	1960	1955

ANNUAL TOTAL	31024		81522				
ANNUAL MEAN	84.8		223			128	
HIGHEST ANNUAL MEAN						337	1983
LOWEST ANNUAL MEAN						62.4	1956
HIGHEST DAILY MEAN	222	May 30	1050	May 18	1880		Jun 2 1983
LOWEST DAILY MEAN	30	Jun 30	39	Oct 6	18		Jun 30 1960
ANNUAL SEVEN-DAY MINIMUM	31	Jun 30	42	Oct 1	19		Jun 29 1960
ANNUAL RUNOFF (AC-FT)	61540		161700		92520		
10 PERCENT EXCEEDS	133		561		204		
50 PERCENT EXCEEDS	80		122		103		
90 PERCENT EXCEEDS	38		89		40		

e Estimated

## SEVIER LAKE BASIN

10183500 SEVIER RIVER NEAR KINGSTON, UT

LOCATION.--Lat 38°12'22", long 112°12'25", in SE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 16, T. 30 S., R. 3 W., Piute County, Hydrologic Unit 16030001, on left bank 1,000 ft upstream from bridge on State Highway 62, 1.1 mi west of Kingston, and 1.9 mi upstream from East Fork.

DRAINAGE AREA.--1,131 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1914 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,980 ft above sea level, from river-profile map. Prior to Sept. 20, 1918, at site 1 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,000 ft<sup>3</sup>/s (including estimated flow of 360 ft<sup>3</sup>/s in overflow channel bypassing station), Mar. 4, 1938, gage height, 5.20 ft from rating curve extended above 600 ft<sup>3</sup>/s; minimum daily discharge, 1.6 ft<sup>3</sup>/s July 24, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 973 ft<sup>3</sup>/s at 1530 hrs, May 18, gage height, 3.70 ft.; minimum daily discharge, 15 ft<sup>3</sup>/s, Oct. 8-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	54	141	130	145	149	246	483	689	124	50	72
2	17	46	141	136	150	146	270	477	660	111	46	65
3	17	50	142	130	145	144	258	477	653	101	37	60
4	17	52	143	114	137	144	262	470	639	99	47	53
5	17	52	145	111	130	150	284	507	606	87	56	52
6	17	56	138	130	128	171	300	490	623	103	59	42
7	16	62	143	135	142	231	267	453	624	108	95	45
8	15	64	146	148	154	226	237	412	614	115	152	46
9	15	65	150	145	178	217	231	369	557	114	113	43
10	15	66	152	140	175	207	254	351	536	107	84	43
11	15	65	155	142	159	213	274	322	490	98	86	41
12	15	80	156	122	155	223	290	347	e470	96	66	38
13	15	87	142	123	147	194	290	416	e450	93	58	35
14	15	86	139	140	136	194	261	486	e420	92	62	32
15	15	78	134	146	136	192	248	593	e400	80	51	31
16	15	124	131	150	139	213	233	657	e380	78	43	29
17	15	125	133	157	144	218	237	777	e370	71	41	28
18	15	124	141	169	145	241	257	927	e350	71	43	31
19	15	129	134	170	164	273	309	935	e330	69	40	39
20	15	129	117	158	347	259	314	906	e320	69	42	40
21	15	128	e115	149	246	246	273	898	e300	68	82	43
22	15	127	e115	151	194	261	265	903	e280	64	96	45
23	16	134	e115	144	171	272	300	905	e260	64	75	44
24	18	125	e115	138	168	293	319	880	e240	74	68	49
25	21	127	e115	132	161	284	324	848	e220	67	71	53
26	37	135	120	130	155	336	329	844	e200	56	176	57
27	31	136	123	133	151	359	369	821	e190	58	139	61
28	35	142	146	132	152	338	407	805	e175	57	116	57
29	32	143	139	132	---	278	438	777	e160	54	100	48
30	42	143	136	136	---	261	475	720	e135	56	90	47
31	58	---	125	136	---	241	---	695	---	51	79	---
TOTAL	633	2934	4187	4309	4554	7174	8821	19951	12341	2555	2363	1369
MEAN	20.4	97.8	135	139	163	231	294	644	411	82.4	76.2	45.6
MAX	58	143	156	170	347	359	475	935	689	124	176	72
MIN	15	46	115	111	128	144	231	322	135	51	37	28
AC-FT	1260	5820	8300	8550	9030	14230	17500	39570	24480	5070	4690	2720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1993, BY WATER YEAR (WY)

	MEAN	83.5	130	144	132	154	171	160	229	153	46.3	53.2	59.7
MAX	319	237	252	218	259	330	507	1154	1139	292	315	232	232
(WY)	1917	1984	1984	1984	1924	1921	1916	1922	1983	1983	1916	1921	1921
MIN	6.90	29.6	34.3	45.0	74.7	65.5	16.3	8.73	7.44	4.89	5.36	7.01	7.01
(WY)	1961	1932	1932	1932	1932	1957	1963	1959	1974	1971	1960	1960	1960

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1915 - 1993

ANNUAL TOTAL	25217.9	71191	126
ANNUAL MEAN	68.9	195	359
HIGHEST ANNUAL MEAN			49.4
LOWEST ANNUAL MEAN			1560
HIGHEST DAILY MEAN	162	Mar 4	935
LOWEST DAILY MEAN	9.4	Jul 26	15
ANNUAL SEVEN-DAY MINIMUM	9.7	Jul 26	15
ANNUAL RUNOFF (AC-FT)	50020	141200	91300
10 PERCENT EXCEEDS	136	470	228
50 PERCENT EXCEEDS	58	137	112
90 PERCENT EXCEEDS	13	38	12

e Estimated

## SEVIER LAKE BASIN

281

10183900 EAST FORK SEVIER RIVER NEAR RUBYS INN, UT

LOCATION.--Lat 37°34'33", long 112°15'54", in NE1/4, SE1/4, NW1/4, sec. 19, T. 37 S., R. 4 W., Garfield County, Hydrologic Unit 16030002, Dixie National Forest, on left bank about 100 ft upstream from highway bridge, 0.6 mi downstream from Skunk Creek, 3.6 mi upstream from Tropic Reservoir Dam, 9.1 mi southwest of Rubys Inn, and 10.5 mi southeast of Hatch.

DRAINAGE AREA.--71.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR UT-74-1: 1973.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,860 ft above sea level, from river-profile map. Prior to October 10, 1966, on right bank at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 448 ft<sup>3</sup>/s, May 23, 1980, gage height, 3.70 ft; no flow for several days in February and March 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct. 25	0330	67	2.62	Aug. 8	1130	85	2.73
May 17	0630	*257	*3.32	Aug. 21	0030	57	2.55

Minimum daily, 3.8 ft<sup>3</sup>/s, several days in December and January.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	18	e7.2	e3.8	e8.4	e7.6	45	176	74	19	9.5	13
2	5.6	16	e7.8	e3.8	e7.6	e7.0	51	171	68	18	9.5	12
3	5.4	15	e8.0	e3.8	e7.0	e7.4	52	170	64	18	10	11
4	5.4	e9.2	e7.4	e3.8	e7.6	e7.2	53	190	58	17	10	11
5	5.6	e8.5	e7.0	e4.0	e8.0	e7.2	55	161	55	17	9.7	10
6	5.7	e9.0	e6.8	e4.2	e8.2	e7.6	53	150	62	16	9.5	10
7	5.5	11	e7.0	e5.0	e8.4	e7.8	47	154	62	15	10	9.9
8	5.8	10	e7.2	e6.0	e8.4	e7.6	48	143	55	14	35	9.5
9	5.9	9.9	e7.2	e6.0	e8.4	e8.6	55	126	48	14	16	9.3
10	5.8	9.7	e5.8	e5.8	e8.4	e9.4	59	127	45	13	14	9.1
11	5.8	e8.4	e5.2	e5.8	e7.8	e9.6	67	132	43	13	14	8.8
12	5.9	e8.4	e4.8	e5.4	e7.6	e14	79	142	41	13	12	8.6
13	5.9	e9.0	e4.4	e6.0	e7.6	e13	65	154	39	12	12	8.7
14	5.7	e9.4	e3.8	e6.8	e7.4	e16	60	194	37	12	11	8.7
15	5.9	10	e4.2	e7.0	e7.8	e16	62	202	35	12	11	9.1
16	6.1	10	e4.6	e8.0	e8.2	e17	69	222	34	11	10	9.3
17	6.0	10	e4.8	e8.0	e8.0	e18	83	241	33	11	10	9.3
18	6.1	9.9	e5.4	e8.0	e8.0	e17	98	228	33	11	9.9	11
19	6.2	11	e4.2	e7.6	e8.8	e17	92	211	31	11	10	9.8
20	6.0	e9.2	e4.6	e7.4	e8.4	e17	94	196	30	11	20	9.3
21	6.2	e8.2	e4.6	e7.2	e7.8	e18	104	182	29	10	28	9.0
22	6.5	e8.2	e4.6	e7.8	e7.4	e22	121	174	28	10	13	8.8
23	6.4	e7.8	e4.2	e7.8	e7.4	e27	137	162	26	10	12	8.5
24	7.4	e7.8	e3.8	e7.8	e7.8	e33	135	151	25	11	11	8.5
25	35	e7.6	e3.8	e7.2	e8.2	e38	140	139	24	11	11	8.7
26	16	e6.8	e3.8	e7.6	e8.0	e40	154	130	24	9.8	13	8.7
27	11	e6.8	e3.8	e7.8	e7.6	e51	160	120	22	9.7	16	8.6
28	11	e7.4	e4.8	e7.8	e7.4	e42	162	109	21	9.7	13	8.6
29	14	e7.8	e5.2	e7.8	---	38	167	98	20	9.5	13	8.5
30	16	e7.0	e4.6	e8.0	---	36	171	86	20	9.9	16	8.5
31	32	---	e4.0	e8.8	---	39	---	79	---	9.4	14	---
TOTAL	277.4	287.0	164.6	201.8	221.6	616.0	2738	4920	1186	388.0	413.1	283.8
MEAN	8.95	9.57	5.31	6.51	7.91	19.9	91.3	159	39.5	12.5	13.3	9.46
MAX	35	18	8.0	8.8	8.8	51	171	241	74	19	35	13
MIN	5.4	6.8	3.8	3.8	7.0	7.0	45	79	20	9.4	9.5	8.5
AC-FT	550	569	326	400	440	1220	5430	9760	2350	770	819	563

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1993, BY WATER YEAR (WY)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
MEAN	9.92	10.3	8.73	8.03	9.56	15.1	36.5	55.0	22.7	10.1	9.50	8.77																					
MAX	17.0	18.2	24.3	18.3	15.2	24.5	91.3	225	117	32.2	24.6	17.9																					
(WY)	1984	1988	1967	1984	1963	1989	1993	1980	1980	1980	1983	1983																					
MIN	3.83	3.79	3.87	3.48	2.24	1.97	7.60	6.26	3.85	2.62	3.91	3.87																					
(WY)	1965	1965	1965	1960	1964	1964	1977	1972	1980	1963	1962	1964																					

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1962 - 1993

ANNUAL TOTAL	4657.0	11697.3	
ANNUAL MEAN	12.7	32.0	
HIGHEST ANNUAL MEAN			17.1
LOWEST ANNUAL MEAN			45.0
HIGHEST DAILY MEAN	56	241	418
LOWEST DAILY MEAN	3.8	3.8	0.00
ANNUAL SEVEN-DAY MINIMUM	4.1	3.9	0.00
ANNUAL RUNOFF (AC-FT)	9240	23200	12360
10 PERCENT EXCEEDS	28	113	31
50 PERCENT EXCEEDS	7.8	10	9.8
90 PERCENT EXCEEDS	5.0	5.7	4.6

e Estimated

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## SEVIER LAKE BASIN

10188000 OTTER CREEK RESERVOIR NEAR ANTIMONY, UT

LOCATION.--Lat 38°10'15", long 112°01'25", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, sec. 28, T. 30 S., R. 2 W., Piute County, Hydrologic Unit 16030002, near spillway on right side of dam on Otter Creek, 3.7 mi northwest of Antimony and 9.3 mi east of Kingston.

DRAINAGE AREA.--373 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1914 to September 1915, January 1934 to current year. Published as "near Coyote" 1914.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Staff gage read intermittently and on last day of each month. Datum of gage is 6,338 ft above sea level (from elevation data provided by State Engineer's Office).

REMARKS.--Reservoir was formed in 1898 by a 15-ft earthfill, rock-faced dam which was raised some each year to the ultimate height of 42 ft in 1915. The dam has a concrete core through the center. Capacity, 52,700 acre-ft between elevation 6,338 ft (bottom of outlet gage) and 6,374 ft (top of flashboards on spillway). At times, additional flashboards are added or surcharge occurs increasing the elevation to 6,375 ft, capacity, 55,200 acre-ft. Spillway crest is at elevation 6,371.5 ft. Figures given herein represent total contents. Reservoir stores water from Otter Creek and also water diverted from East Fork Sevier River, for irrigation in Sevier River basin.

COOPERATION.--Elevation record provided by Sevier River Commissioner. Revised capacity table, based on Soil Conservation Service survey in 1960, used since Oct. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 56,760 acre-ft, May 31, 1982, elevation, 6,375.6 ft; minimum observed, 200 acre-ft, Sept. 10, 1956, elevation, 6,339.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 54,690 acre-ft, May 31, elevation, 6,374.8 ft; minimum observed, 4,530 acre-ft, Oct. 31, elevation, 6,346.6 ft.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30 . . . . .	6,343.8	2,280	--
Oct. 31 . . . . .	6,346.6	4,530	+2,250
Nov. 30 . . . . .	6,350.6	8,910	+4,380
Dec. 31 . . . . .	6,353.6	12,920	+4,010
CAL YR 1992 . . . . .	--	--	-4,730
Jan. 31 . . . . .	6,356.8	17,650	+4,730
Feb. 28 . . . . .	--	*22,280	+4,630
Mar. 31 . . . . .	6,364.5	31,300	+9,020
Apr. 30 . . . . .	6,370.0	43,020	+11,720
May 31 . . . . .	6,374.8	54,690	+11,670
June 30 . . . . .	6,372.7	49,440	-5,250
July 31 . . . . .	6,370.1	43,250	-6,190
Aug. 31 . . . . .	6,368.1	38,770	-4,480
Sept. 30 . . . . .	6,367.4	37,270	-1,500
WTR YR 1993 . . . . .	--	--	+34,990

(\*) No end-of-month gage height reading, contents interpolated.

## SEVIER LAKE BASIN

283

10189000 EAST FORK SEVIER RIVER NEAR KINGSTON, UT

LOCATION.--Lat 38°11'49" long 112°09'01", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 13, T. 30 S., R. 3 W., Piute County, Hydrologic Unit 16030002, on left bank 1,500 ft upstream from bridge on State Highway 22, 2.2 mi east of Kingston, 4.6 mi upstream from mouth, and 10 mi downstream from Otter Creek.

DRAINAGE AREA.--1,207 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1913 to current year.

REVISED RECORDS.--WSP 750: 1931-32. WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,150 ft above sea level, from river-profile map. Prior to Apr. 29, 1914, staff gage at site 0.5 mi upstream at different datum. Apr. 29, 1914 to June 2, 1939, water-stage recorder at site 4,000 ft downstream at different datum. June 3, 1939 to July 29, 1970, water-stage recorder at site 2,500 ft downstream at different datum. July 30, 1970 to July 12, 1983, water stage recorder 60 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation above and below station. Also diversion upstream for storage in Otter Creek Reservoir (see station 10188000); flow regulated by reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,030 ft<sup>3</sup>/s, May 12, 1941, gage height, 5.05 ft; maximum gage height, 7.35 ft, Aug. 27, 1929, site and datum then in use; minimum, 1.0 ft<sup>3</sup>/s, Jan. 25, 1976, gage height, 0.52 ft, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 437 ft<sup>3</sup>/s at 1130 hrs, May 22, gage height, 2.71 ft; minimum daily discharge, 9.0 ft<sup>3</sup>/s, Dec. 21-26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	17	e12	e11	12	17	14	48	215	88	86	90
2	16	16	e12	e11	12	17	13	56	214	87	89	87
3	17	16	e12	e10	11	16	14	61	213	86	90	85
4	17	15	e12	e10	e12	16	14	52	213	79	89	72
5	17	15	e12	e10	e12	16	17	62	211	78	88	73
6	18	15	e12	e11	e12	17	18	58	211	80	89	78
7	16	16	e11	e13	12	17	18	53	210	81	89	80
8	16	17	e12	e13	12	17	17	48	215	86	89	82
9	18	15	e12	e13	14	56	17	49	217	86	89	80
10	18	15	e13	e13	14	20	17	52	162	80	86	78
11	17	14	e13	e14	15	18	17	53	156	87	86	33
12	15	e14	e13	e13	15	17	16	53	144	89	83	22
13	16	14	e13	e13	15	15	16	52	92	89	82	22
14	17	14	e13	e13	14	15	16	54	89	85	85	23
15	15	14	e13	e14	13	15	17	52	73	82	84	24
16	16	14	e12	e14	13	15	20	71	77	79	83	24
17	17	14	e12	e14	14	14	34	136	108	77	83	20
18	18	14	e12	e13	13	16	34	200	96	84	83	22
19	19	14	e11	e13	17	16	34	305	73	85	84	22
20	18	14	e10	e12	30	15	35	375	76	83	83	21
21	18	14	e9.0	e12	20	15	35	406	69	83	82	21
22	19	e14	e9.0	e11	18	15	36	417	97	86	81	21
23	19	e14	e9.0	11	17	15	35	390	98	87	81	20
24	19	e14	e9.0	e11	17	15	35	387	96	85	81	20
25	19	e13	e9.0	e11	16	15	36	363	97	88	85	21
26	20	e13	e9.0	e11	14	15	38	253	98	85	87	22
27	18	e13	e10	e12	14	17	41	255	92	84	89	21
28	18	e13	e11	e13	19	18	42	241	89	84	78	21
29	18	e13	e12	e13	---	17	51	251	90	87	85	21
30	18	e12	e13	13	---	17	52	224	89	87	88	22
31	19	---	e11	12	---	16	---	227	---	84	88	---
TOTAL	546	430	353.0	378	417	540	799	5304	3980	2611	2645	1248
MEAN	17.6	14.3	11.4	12.2	14.9	17.4	26.6	171	133	84.2	85.3	41.6
MAX	20	17	13	14	30	56	52	417	217	89	90	90
MIN	15	12	9.0	10	11	14	13	48	69	77	78	20
AC-FT	1080	853	700	750	827	1070	1580	10520	7890	5180	5250	2480

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1993, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1914	37.3	241	1923	9.12	1962
1915	27.2	151	1985	8.97	1965
1916	22.6	128	1939	8.25	1973
1917	22.3	156	1939	7.00	1960
1918	25.5	146	1986	7.19	1977
1919	37.3	171	1983	11.7	1956
1920	75.9	398	1942	15.0	1935
1921	165	1109	1922	28.4	1945
1922	148	551	1983	28.0	1957
1923	166	365	1915	31.3	1936
1924	133	334	1917	18.0	1934
1925	85.6	242	1917	18.4	1934

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1914 - 1993

ANNUAL TOTAL	23824.6	19251.0	79.2
ANNUAL MEAN	65.1	52.7	201
HIGHEST ANNUAL MEAN			33.5
LOWEST ANNUAL MEAN			1740
HIGHEST DAILY MEAN	239	417	May 12 1941
LOWEST DAILY MEAN	6.5	9.0	Dec 21 1977
ANNUAL SEVEN-DAY MINIMUM	7.2	9.1	Feb 25 1977
ANNUAL RUNOFF (AC-FT)	47260	38180	57390
10 PERCENT EXCEEDS	211	91	209
50 PERCENT EXCEEDS	18	18	33
90 PERCENT EXCEEDS	9.1	12	13

e Estimated



## SEVIER LAKE BASIN

10191000 PIUTE RESERVOIR NEAR MARYSVALE, UT

LOCATION.--Lat 38°19'26", long 112°11'26", in NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 3, T. 29 S., R. 3 W., Piute County, Hydrologic Unit 16030001, at Piute Dam on Sevier River, 9.0 mi south of Marysvale.

DRAINAGE AREA.--2,438 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1914 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Staff gage read at irregular intervals and end of each month. Datum of gage is 5,900.8 ft above sea level (levels by Office of State Engineer).

REMARKS.--Reservoir is formed by earthfill dam; storage began in summer of 1910. Capacity, 71,830 acre-ft between elevation 5,910.8 ft (approximate bottom of reservoir) and elevation 5,976.8 ft (top of flashboards on spillway since 1941). Spillway crest is at elevation 5,971.0 ft. No dead storage. Water is used for irrigation.

COOPERATION.--Elevation record provided by Sevier River Commissioner. Revised capacity table, based on Soil Conservation Service survey in 1960, used since Oct. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 83,050 acre-ft, June 5, 1983, elevation, 5,980.6 ft; no contents at times many years.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 71,570 acre-ft, May 31, June 12, elevation, 5,976.7 ft; minimum observed, 3,320 acre-ft, Oct. 31, elevation, 5,931.4 ft.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30 . . . . .	5,928.3	1,820	--
Oct. 31 . . . . .	5,931.4	3,320	+1,500
Nov. 30 . . . . .	5,941.0	11,200	+7,880
Dec. 31 . . . . .	5,948.3	19,960	+8,760
CAL YR 1992 . . . . .	--	--	+2,200
Jan. 31 . . . . .	5,955.1	29,780	+9,820
Feb. 28 . . . . .	--	*33,330	+3,550
Mar. 31 . . . . .	5,964.3	45,390	+12,060
Apr. 30 . . . . .	5,971.3	59,090	+13,700
May 31 . . . . .	5,976.7	71,570	+12,480
June 30 . . . . .	5,975.5	68,540	-3,030
July 31 . . . . .	5,967.0	50,450	-18,090
Aug. 31 . . . . .	5,954.6	29,010	-21,440
Sept. 30 . . . . .	5,950.3	22,680	-6,330
WTR YR 1993 . . . . .	--	--	+20,860

(\*) No end-of-month gage height reading, contents interpolated.

## SEVIER LAKE BASIN

285

10191500 SEVIER RIVER BELOW PIUTE DAM, NEAR MARYSVALE, UTAH

LOCATION.--Lat 38°19'43", long 112°11'30", in NW1/4, SW1/4, SE1/4, sec. 34, T. 28 S., R. 3 W., Piute County, Hydrologic Unit 16030003, on left bank 0.25 mi downstream from Piute Dam and 8.5 mi south of Marysville.

DRAINAGE AREA.--2,441 mi<sup>2</sup>.

PERIOD OF RECORD.--May to August 1911, May 1912 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,870 ft above sea level, by barometer. Prior to May 4, 1912, nonrecording gage at site 0.25 mi upstream at different datums. May 4, 1912, to Mar. 31, 1935, water-stage recorder at site 0.05 mi upstream at different datum. Apr. 1, 1935, to Apr. 7, 1936, at datum 0.7 ft higher. Apr. 8, 1936, to Feb. 25, 1970, at datum 0.5 ft higher. Feb. 26, 1970, to Apr. 22, 1979 at site 0.25 mi downstream at different datum. Apr. 22, 1979, to Sept. 30, 1985, at datum 10.0 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Piute Reservoir (see station 10191000).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft<sup>3</sup>/s, May 23, 24, 1922, gage height, 4.45 ft site and datum then in use; practically no flow at times when reservoir gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 844 ft<sup>3</sup>/s at 1900 hrs, June 5, gage height 12.81 ft; minimum daily discharge, 3.7 ft<sup>3</sup>/s, Nov. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	47	4.0	5.3	13	124	6.9	422	657	421	496	492
2	22	47	4.0	5.2	13	124	6.9	440	717	451	472	491
3	23	47	4.0	5.0	40	124	7.0	461	721	479	466	490
4	41	44	4.0	5.0	51	124	7.2	461	730	466	489	489
5	40	44	4.2	4.9	97	124	7.1	461	773	417	521	431
6	41	43	4.2	5.0	122	124	7.3	459	807	411	519	400
7	41	40	4.2	5.7	122	124	7.3	456	760	405	514	356
8	36	37	4.2	6.2	124	124	7.3	455	758	404	515	320
9	26	36	4.2	6.5	124	124	8.0	455	749	409	522	289
10	26	40	4.2	6.6	124	98	8.2	476	732	412	512	278
11	26	45	4.2	6.6	124	22	8.0	499	730	407	504	297
12	26	33	4.2	6.9	124	14	8.4	504	683	380	498	263
13	26	28	4.2	7.0	124	14	8.7	475	604	376	497	257
14	44	29	4.2	7.3	124	15	8.9	421	522	371	504	245
15	51	29	4.4	7.7	124	15	8.6	369	477	454	511	239
16	58	21	4.5	7.7	124	15	8.7	315	357	500	507	216
17	63	12	4.5	7.7	124	14	8.0	317	241	492	516	191
18	63	11	4.5	7.7	124	10	7.9	318	241	496	512	156
19	63	13	4.5	7.9	122	9.7	8.3	450	249	539	509	110
20	63	4.9	4.5	8.9	123	9.5	8.5	549	383	540	512	107
21	63	4.1	4.5	9.6	124	9.3	8.6	554	384	553	517	37
22	63	4.0	4.5	10	124	9.3	8.0	585	405	560	515	15
23	63	3.7	4.5	11	124	8.9	8.4	606	414	555	515	55
24	63	3.8	4.5	10	124	8.8	9.1	659	409	510	503	63
25	63	4.0	4.6	11	124	8.4	13	706	409	487	498	53
26	63	4.0	4.7	11	124	8.1	81	710	407	429	497	67
27	63	4.0	4.7	11	124	8.0	136	661	409	432	486	59
28	58	4.0	4.7	11	124	7.7	216	632	407	424	497	75
29	56	4.0	4.8	12	---	7.7	293	642	406	412	504	79
30	54	4.0	5.0	12	---	7.7	353	644	426	446	499	89
31	50	---	5.3	13	---	7.5	---	644	---	501	495	---
TOTAL	1460	690.5	136.7	252.4	3059	1443.6	1283.3	15806	15967	14139	15622	6709
MEAN	47.1	23.0	4.41	8.14	109	46.6	42.8	510	532	456	504	224
MAX	63	47	5.3	13	124	124	353	710	807	560	522	492
MIN	22	3.7	4.0	4.9	13	7.5	6.9	315	241	371	466	15
AC-FT	2900	1370	271	501	6070	2860	2550	31350	31670	28040	30990	13310

CAL YR 1992 TOTAL 51765.0 MEAN 141 MAX 550 MIN 3.7 AC-FT 102700  
WTR YR 1993 TOTAL 76568.5 MEAN 210 MAX 807 MIN 3.7 AC-FT 151900

## SEVIER LAKE BASIN

10194000 SEVIER RIVER ABOVE CLEAR CREEK, NEAR SEVIER, UT

LOCATION.--Lat 38°34'20", long 112°15'27", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 5, T. 26 S., R. 4 W., Sevier County, Hydrologic Unit 16030003, on right bank 0.6 mi upstream from bridge on U.S. Highway 89, 0.7 mi upstream from Clear Creek, and 1.0 mi south of Sevier.

DRAINAGE AREA.--2,707 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1911 to November 1916 (published as Sevier River at Sevier), April 1939 to September 1955, October 1960 to current year. Records for November 1916 to September 1929 (published as Sevier River at Sevier) include flow of Clear Creek and are not equivalent.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,560 ft above sea level, by barometer. Prior to May 16, 1912, nonrecording gage, and May 16, 1912 to Nov. 15, 1916, water-stage recorder, at site 0.8 mi downstream at different datums (datum lowered 1.0 ft Mar. 31, 1913).

REMARKS.--Records good except for estimated daily discharges, which are poor. Many diversions above station for irrigation. Flow regulated by Piute Reservoir.

EXTREMES FOR PERIOD OF RECORD.--(Not including flow of Clear Creek): Maximum discharge, 2,500 ft<sup>3</sup>/s, June 3, 1983, gage height, 4.82 ft; minimum, 2.3 ft<sup>3</sup>/s, Dec. 13, 1964. 1916-29 (including flow of Clear Creek): Maximum discharge, 2,800 ft<sup>3</sup>/s, during last week of May 1922, computed on basis of records for station near Marysville; minimum daily discharge, 5.8 ft<sup>3</sup>/s, Jan. 11, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,030 ft<sup>3</sup>/s at 1200 hrs, May 27, gage height, 3.05 ft; minimum daily discharge, 14 ft<sup>3</sup>/s, Nov. 24-26 and Dec. 13, 14, 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	59	e17	e18	33	145	29	388	854	547	473	508
2	30	57	e18	e19	34	146	28	435	886	540	470	503
3	29	55	e19	19	33	146	28	454	904	596	468	499
4	29	53	20	19	51	145	27	472	870	595	504	496
5	46	51	e20	21	62	145	28	478	856	532	535	488
6	46	50	e17	e25	121	145	34	469	886	493	537	409
7	46	49	e17	28	137	146	30	465	875	485	541	398
8	47	47	e18	29	142	144	27	471	840	487	546	327
9	42	44	e18	28	148	142	27	471	810	484	543	319
10	32	42	19	24	145	145	31	473	794	480	542	284
11	31	45	19	26	144	101	27	483	767	483	542	290
12	33	48	18	e26	144	50	27	507	785	457	537	286
13	31	40	14	e28	143	42	28	533	760	440	535	263
14	29	35	e14	e29	143	40	27	538	775	429	535	263
15	45	36	e15	29	144	39	27	532	717	427	534	249
16	56	36	e15	29	147	38	27	489	733	522	532	246
17	61	33	e16	30	147	38	27	499	538	520	541	220
18	66	25	e16	32	146	40	30	554	448	510	543	211
19	66	24	e15	33	150	37	31	552	408	517	543	160
20	66	28	e14	30	153	36	28	743	467	544	544	130
21	66	20	e14	29	152	35	29	833	536	545	543	112
22	66	21	e15	29	147	33	29	830	560	558	539	62
23	66	18	e15	26	147	32	30	869	595	562	537	46
24	66	14	e15	e26	150	31	36	864	585	542	533	67
25	69	e14	e16	e26	148	30	35	943	564	500	529	67
26	67	e14	e16	e28	145	30	34	966	555	458	528	64
27	67	e15	e17	30	147	36	106	996	554	407	522	71
28	68	e16	e19	e30	146	40	165	951	556	414	519	66
29	62	e18	e21	31	---	34	258	905	553	398	517	83
30	62	e17	e21	27	---	31	330	882	553	399	515	85
31	71	---	e18	35	---	30	---	876	---	466	512	---
TOTAL	1582	1024	526	839	3549	2272	1620	19921	20584	15337	16339	7272
MEAN	51.0	34.1	17.0	27.1	127	73.3	54.0	643	686	495	527	242
MAX	71	59	21	35	153	146	330	996	904	596	546	508
MIN	21	14	14	18	33	30	27	388	408	398	468	46
AC-FT	3140	2030	1040	1660	7040	4510	3210	39510	40830	30420	32410	14420

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1993, BY WATER YEAR (WY)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	109	85.7	63.9	60.8	131	152	217	468	453	444	364	188																					
MAX	312	303	492	383	579	430	549	977	2058	786	542	455																					
(WY)	1984	1984	1985	1984	1984	1984	1985	1983	1983	1983	1985	1985																					
MIN	47.6	29.1	7.38	9.22	16.0	19.6	29.1	251	120	196	97.3	38.1																					
(WY)	1987	1990	1979	1979	1975	1971	1968	1964	1963	1961	1961	1977																					

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1961 - 1993

ANNUAL TOTAL	56642	90865		
ANNUAL MEAN	155	249		
HIGHEST ANNUAL MEAN			229	
LOWEST ANNUAL MEAN			529	1983
HIGHEST DAILY MEAN	571	996	112	1961
LOWEST DAILY MEAN	14	14	2450	Jun 2 1983
ANNUAL SEVEN-DAY MINIMUM	15	15	5.8	Jan 11 1979
ANNUAL RUNOFF (AC-FT)	112300	180200	6.0	Jan 6 1979
10 PERCENT EXCEEDS	439	557	165700	
50 PERCENT EXCEEDS	60	85	527	
90 PERCENT EXCEEDS	19	19	153	
			22	

e Estimated

## SEVIER LAKE BASIN

287

10194200 CLEAR CREEK ABOVE DIVERSIONS, NEAR SEVIER, UT

LOCATION.--Lat 38°34'45", long 112°17'22", in NW1/4NW1/4SW1/4 sec. 31, T. 25 S., R. 4 W., Sevier County, Hydrologic Unit 16030003, on left bank on State Highway 4, 1.8 mi west of Sevier, 2.3 mi upstream from mouth, and 17.2 mi southwest of Richfield.

DRAINAGE AREA.--164 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,680 ft above sea level, from topographic map.

REMARKS.--Records fair except those for Sept. 2-30 and for estimated daily discharges, which are poor. Flow regulated by several small reservoirs, combined capacity about 1,000 acre-ft, at headwaters.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 906 ft<sup>3</sup>/s, Aug. 26, 1988, gage height, 2.40 ft; minimum, 1.5 ft<sup>3</sup>/s, Feb. 21, 1976, gage height, 0.85 ft, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 444 ft<sup>3</sup>/s at 0430 hrs, May 21, gage height, 2.14 ft; minimum daily discharge, 4.0 ft<sup>3</sup>/s, Nov. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	17	7.8	e11	14	16	54	123	213	88	e36	e15
2	8.5	18	8.3	e11	13	15	57	115	202	88	e34	12
3	8.4	17	9.1	e10	10	15	45	128	192	104	e31	9.1
4	8.8	11	9.2	e8.6	11	17	47	194	167	100	e40	9.6
5	9.3	15	9.3	e8.6	11	16	52	155	154	89	e34	16
6	9.3	12	9.7	8.9	16	18	49	126	146	83	e32	14
7	9.2	12	9.9	9.7	14	21	39	166	136	83	e30	12
8	9.1	13	12	12	14	25	35	139	129	83	e28	12
9	9.2	11	11	11	16	29	37	132	113	82	e26	11
10	9.3	11	11	11	15	33	39	126	107	78	e25	11
11	9.5	9.7	11	8.9	13	40	39	143	109	76	e24	9.7
12	9.5	11	11	8.4	13	30	46	173	119	74	e22	9.1
13	9.1	12	8.3	14	11	27	40	222	136	72	e20	11
14	9.0	12	7.9	15	9.9	29	36	255	149	68	e20	13
15	9.2	12	e7.5	13	11	36	34	241	165	64	e19	13
16	9.4	12	7.2	13	16	44	37	235	171	61	e19	12
17	9.5	11	6.7	13	14	58	42	262	160	57	e18	14
18	9.5	12	e6.7	14	12	102	54	285	137	54	e18	20
19	9.1	12	e7.0	13	23	57	53	307	119	53	e17	15
20	9.3	12	7.2	11	25	50	51	300	124	51	e17	13
21	9.6	9.0	e7.0	14	13	55	56	345	118	50	e18	11
22	9.9	11	e6.5	14	15	61	64	323	121	49	e17	11
23	9.8	13	e6.3	9.9	17	72	85	304	116	48	e18	11
24	10	9.4	e6.3	9.8	17	80	83	280	109	55	e18	11
25	13	4.5	e6.3	8.6	15	87	75	289	98	48	e17	11
26	12	4.0	e6.7	11	14	89	87	295	93	47	e18	11
27	11	4.6	e8.5	14	16	87	107	287	94	e46	e17	11
28	12	5.6	11	12	15	71	114	291	94	e44	e17	9.9
29	13	7.8	12	14	---	58	115	259	93	e43	e17	9.8
30	23	8.7	11	15	---	50	123	232	88	e40	e16	9.3
31	31	---	e11	15	---	53	---	226	---	e38	e16	---
TOTAL	337.0	330.3	270.4	362.4	403.9	1441	1795	6958	3972	2016	699	357.5
MEAN	10.9	11.0	8.72	11.7	14.4	46.5	59.8	224	132	65.0	22.5	11.9
MAX	31	18	12	15	25	102	123	345	213	104	40	20
MIN	8.4	4.0	6.3	8.4	9.9	15	34	115	88	38	16	9.1
AC-FT	668	655	536	719	801	2860	3560	13800	7880	4000	1390	709

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1993, BY WATER YEAR (WY)

	MEAN	12.9	12.0	10.5	10.2	13.2	22.0	55.2	134	107	37.4	17.5	13.5
MAX	26.8	21.6	19.4	21.4	35.3	48.5	197	481	322	122	51.4	30.5	
(WY)	1985	1985	1967	1984	1984	1986	1984	1984	1983	1983	1984	1984	
MIN	6.62	7.30	4.29	4.50	5.86	10.1	10.9	21.9	21.1	8.01	4.74	4.20	
(WY)	1960	1978	1978	1978	1978	1964	1963	1977	1959	1959	1977	1959	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1958 - 1993

ANNUAL TOTAL	8102.1	18942.5	
ANNUAL MEAN	22.1	51.9	37.2
HIGHEST ANNUAL MEAN			96.2
LOWEST ANNUAL MEAN			12.0
HIGHEST DAILY MEAN	92	May 27	633
LOWEST DAILY MEAN	4.0	Nov 26	1.8
ANNUAL SEVEN-DAY MINIMUM	5.8	Jan 17	2.4
ANNUAL RUNOFF (AC-FT)	16070		26960
10 PERCENT EXCEEDS	63		92
50 PERCENT EXCEEDS	11		15
90 PERCENT EXCEEDS	6.0		7.5

e Estimated

## SEVIER LAKE BASIN

10205000 SEVIER RIVER NEAR SIGURD, UT

LOCATION.--Lat 38°52'13", long 111°57'14", in SW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 19, T. 22 S., R. 1 W., Sevier County, Hydrologic Unit 16030003, on left bank 200 ft downstream from county road bridge, 0.5 mi downstream from Rocky Ford Dam, 2.3 mi northeast of Sigurd, and 5.0 mi upstream from Lost Creek.

DRAINAGE AREA.--3,375 mi<sup>2</sup>.

PERIOD OF RECORD.--July to September 1912, July 1914 to current year. Prior to October 1938, published as "near Vermillion."

REVISED RECORDS.--WSP 1394: 1927-28, 1947.

GAGE.--Water-stage recorder. Elevation of gage is 5,180 ft above sea level, by barometer. July to September 1912, nonrecording gage 0.3 mi downstream at different datum. July 31, 1914 to Apr. 19, 1917, nonrecording gage and Apr. 20, 1917 to Oct. 16, 1935, water-stage recorder, at present site at datum 2.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by reservoirs above station. During irrigation season practically entire flow through Rocky Ford Dam is diverted above station for irrigation below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,400 ft<sup>3</sup>/s May 30, 1922, gage height, 6.1 ft, present datum, from rating curve extended above 600 ft<sup>3</sup>/s on basis of maximum discharge for other Sevier River stations; practically no flow (seepage only) at times when Rocky Ford Reservoir gates are closed.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 692 ft<sup>3</sup>/s May 30, gage height, 7.33 ft; minimum daily discharge, 2.8 ft<sup>3</sup>/s Sept. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	e79	72	105	121	250	127	62	639	11	68	32
2	34	84	73	115	125	248	96	47	609	8.8	50	35
3	28	e79	85	122	125	247	87	51	611	6.5	45	69
4	26	e74	87	102	123	246	87	44	612	6.0	27	116
5	28	e70	86	95	123	247	90	30	606	6.0	25	142
6	28	e70	82	109	133	244	98	34	612	6.8	25	163
7	e33	e71	80	117	146	242	110	40	595	7.4	39	169
8	e31	e73	83	122	221	245	106	61	591	7.0	80	150
9	28	e72	94	125	281	248	91	96	607	6.9	117	131
10	20	e64	94	131	249	252	76	101	623	6.8	118	123
11	21	e66	96	128	245	261	69	104	624	7.1	110	88
12	16	e68	97	118	251	231	50	87	629	15	87	81
13	9.5	e72	94	111	252	174	37	86	612	54	84	e30
14	6.9	e74	87	120	252	156	41	127	559	78	81	e6.5
15	30	e80	79	123	240	68	34	158	460	68	79	e7.0
16	48	e77	78	125	242	21	30	197	434	30	70	11
17	e52	e77	84	126	246	22	41	235	430	19	60	50
18	e52	e78	85	129	246	22	51	289	195	34	60	34
19	53	81	83	131	249	24	58	359	52	40	52	2.8
20	e57	79	72	133	285	69	62	439	74	31	42	3.0
21	59	77	81	130	302	132	50	450	59	25	24	3.2
22	60	76	74	128	282	161	37	532	73	28	13	92
23	e59	73	73	129	267	166	20	524	94	34	11	194
24	59	76	74	130	262	139	13	588	98	63	7.3	212
25	62	74	74	125	266	138	12	564	93	121	11	137
26	60	69	70	119	257	140	12	588	83	140	17	46
27	63	65	73	119	252	152	11	622	62	159	20	43
28	64	71	80	121	254	172	12	627	44	156	25	54
29	65	75	85	121	---	194	22	643	37	126	30	62
30	66	66	105	122	---	199	44	665	24	107	33	54
31	79	---	101	120	---	165	---	662	---	87	32	---
TOTAL	1356.4	2210	2581	3751	6297	5275	1674	9112	10841	1495.3	1542.3	2340.5
MEAN	43.8	73.7	83.3	121	225	170	55.8	294	361	48.2	49.8	78.0
MAX	79	84	105	133	302	261	127	665	639	159	118	212
MIN	6.9	64	70	95	121	21	11	30	24	6.0	7.3	2.8
AC-FT	2690	4380	5120	7440	12490	10460	3320	18070	21500	2970	3060	4640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1993, BY WATER YEAR (WY)

	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
MEAN	81.4	101	119	127	179	182	138	117	133	30.9	26.4	53.9	
MAX	288	310	591	505	693	634	836	972	2002	367	159	335	
(WY)	1984	1981	1985	1984	1984	1984	1984	1984	1983	1983	1983	1985	
MIN	15.0	34.6	35.4	45.4	61.0	67.0	4.44	4.17	1.47	.88	1.06	.59	
(WY)	1952	1957	1957	1964	1956	1972	1972	1957	1953	1954	1963	1956	

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1944 - 1993

ANNUAL TOTAL	24148.6	48475.5	107	1983
ANNUAL MEAN	66.0	133	482	1966
HIGHEST ANNUAL MEAN			38.7	
LOWEST ANNUAL MEAN			2350	Jun 5 1983
HIGHEST DAILY MEAN	449	Feb 26		
LOWEST DAILY MEAN	1.6	Jul 3		
ANNUAL SEVEN-DAY MINIMUM	1.7	Jul 9		
ANNUAL RUNOFF (AC-FT)	47900	96150	.00	Oct 3 1955
10 PERCENT EXCEEDS	128	266	.03	Oct 3 1955
50 PERCENT EXCEEDS	60	81		
90 PERCENT EXCEEDS	2.8	21	2.1	

e Estimated

## SEVIER LAKE BASIN

289

10205030 SALINA CREEK NEAR EMERY, UT

LOCATION.--Lat 38°54'43", long 111°31'47", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 12, T. 22 S., R. 3 E., Sevier County, Hydrologic Unit 16030003, on right bank, 2.5 mi upstream from Soil Conservation Service retention dam, 15.3 mi west of Emery, and 18.4 mi east of Salina.

DRAINAGE AREA.--51.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,000 ft above sea level, from topographic map. Prior to June 9, 1971, at site 300 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion above station. Slight regulation from small reservoirs at headwaters.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 740 ft<sup>3</sup>/s July 27, 1989, gage height, 5.85 ft present datum from rating curve extended above 150 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum discharge, 0.80 ft<sup>3</sup>/s Nov. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 17	2134	*227	*4.27	No other peak greater than base discharge.			

Minimum daily discharge, 2.8 ft<sup>3</sup>/s Jan. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	6.2	e4.5	e4.0	e3.9	5.6	7.9	28	71	22	17	13
2	7.6	7.1	e4.6	e3.7	e3.8	e5.6	8.1	32	66	21	17	13
3	7.8	6.3	e4.7	e3.5	e3.8	e5.8	8.0	38	63	20	17	12
4	7.6	e6.0	4.7	e3.1	e3.7	e5.9	8.0	38	57	20	17	12
5	7.7	6.0	4.9	e3.1	e3.8	6.0	8.1	29	53	20	17	12
6	7.5	6.1	e4.9	e3.2	e4.0	5.9	8.1	27	52	19	17	12
7	7.3	6.0	4.9	e3.3	e4.1	5.9	8.0	29	49	18	17	12
8	7.2	5.8	5.3	e3.5	e4.0	6.2	8.1	27	50	18	17	12
9	7.4	5.9	5.2	e4.0	e4.5	6.5	8.4	25	46	18	16	12
10	7.2	5.6	5.3	e4.1	e5.0	6.3	8.8	30	43	17	16	12
11	7.2	e5.6	5.2	e3.5	e4.9	6.3	9.0	39	42	17	17	12
12	7.2	e5.7	5.3	e3.3	e5.2	5.9	10	47	40	17	16	12
13	7.2	5.8	5.2	e3.2	e5.2	6.0	8.9	54	39	17	15	12
14	7.2	5.7	e4.5	e3.2	e5.2	6.3	8.8	65	38	17	15	12
15	7.0	5.9	e4.8	e3.1	e5.4	6.6	9.0	74	37	17	15	12
16	7.0	5.3	e4.5	e3.2	e5.6	6.6	9.8	80	37	17	15	12
17	7.0	5.5	e4.3	e3.2	e5.9	6.8	12	136	38	17	14	12
18	7.0	5.5	e3.7	e3.0	e5.7	7.3	13	155	37	17	14	12
19	7.0	5.2	e3.3	e2.9	5.6	7.1	11	152	34	17	14	12
20	7.0	5.1	e3.0	e2.9	5.8	7.0	12	127	33	17	14	12
21	7.0	5.5	e3.2	e2.9	6.0	7.0	15	102	32	17	14	12
22	7.0	e4.7	e3.5	e3.0	5.6	7.4	20	100	31	17	14	12
23	6.4	e4.4	e3.6	e3.0	e5.5	7.9	20	97	30	17	13	12
24	6.2	e4.3	e3.7	e2.9	5.4	8.4	19	98	29	18	13	12
25	6.2	e4.1	e3.5	e2.8	5.5	8.2	17	98	28	17	13	11
26	6.2	e4.2	e3.4	e2.9	e5.6	9.2	22	99	27	17	14	11
27	6.2	e4.3	e3.6	e3.2	5.8	8.9	27	95	25	17	13	11
28	6.2	e4.6	e3.7	e3.4	5.7	8.0	31	96	24	17	14	11
29	6.2	e4.6	e3.9	e3.5	---	7.8	31	92	24	17	13	11
30	6.4	e4.6	e3.9	e3.7	---	7.5	30	84	23	17	13	11
31	6.7	---	e3.8	e4.0	---	7.5	---	77	---	17	13	---
TOTAL	216.3	161.6	132.6	102.3	140.2	213.4	417.0	2270	1198	551	464	356
MEAN	6.98	5.39	4.28	3.30	5.01	6.88	13.9	73.2	39.9	17.8	15.0	11.9
MAX	7.8	7.1	5.3	4.1	6.0	9.2	31	155	71	22	17	13
MIN	6.2	4.1	3.0	2.8	3.7	5.6	7.9	25	23	17	13	11
AC-FT	429	321	263	203	278	423	827	4500	2380	1090	920	706

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1993, BY WATER YEAR (WY)

	9.96	8.30	7.17	6.52	6.46	7.70	15.4	70.2	47.5	17.5	14.0	11.5
MEAN	9.96	8.30	7.17	6.52	6.46	7.70	15.4	70.2	47.5	17.5	14.0	11.5
MAX	18.9	16.0	14.1	13.6	10.8	16.0	51.6	275	162	50.3	34.4	25.4
(WY)	1985	1985	1985	1985	1985	1988	1985	1984	1983	1983	1983	1984
MIN	3.57	3.24	3.33	2.58	2.49	4.25	5.31	5.12	3.70	4.67	4.09	3.55
(WY)	1978	1978	1978	1977	1977	1977	1964	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1992 CALENDAR YEAR	FOR 1993 WATER YEAR	WATER YEARS 1964 - 1993
ANNUAL TOTAL	4094.3	6222.4	
ANNUAL MEAN	11.2	17.0	18.6
HIGHEST ANNUAL MEAN			53.0
LOWEST ANNUAL MEAN			4.58
HIGHEST DAILY MEAN	47	155	434
LOWEST DAILY MEAN	3.0	2.8	1.5
ANNUAL SEVEN-DAY MINIMUM	3.4	2.9	1.7
ANNUAL RUNOFF (AC-FT)	8120	12340	13460
10 PERCENT EXCEEDS	21	38	35
50 PERCENT EXCEEDS	8.2	8.1	9.5
90 PERCENT EXCEEDS	5.2	3.7	5.0

e Estimated

## SEVIER LAKE BASIN

10206000 SALINA CREEK AT SALINA, UT

LOCATION.--Lat 38°57'24", long 111°51'58", in SW¼NW¼NW¼ sec. 25, T. 21 S., R. 1 W., Sevier County, Hydrologic Unit 16030003, on right bank 150 ft upstream from bridge on U.S. Highway 89 in Salina and 0.8 mi upstream from mouth.

DRAINAGE AREA.--292 mi<sup>2</sup>.

PERIOD OF RECORD.--April to September 1914 (fragmentary), April 1915 to September 1916, October 1917 to September 1919, November 1942 to September 1955, water year 1960 (annual maximum), October 1960 to current year.

REVISED RECORDS.--WSP 1734: Drainage area. WSP 2127: 1953(M), 1960(M), 1965(M). WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,140 ft above sea level, estimated on basis of nearby benchmark. Prior to Mar. 23, 1915, nonrecording gage at site 150 ft downstream at different datum. Mar. 23, 1915 to Oct. 16, 1917, nonrecording gage, and Oct. 17, 1917 to Sept. 30, 1919, water-stage recorder at site about 0.2 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above and below station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,650 ft<sup>3</sup>/s June 7, 1984, gage height, 8.32 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 4	0559	263	3.71	May 18	0328	*703	*4.60

Minimum daily discharge, 0.37 ft<sup>3</sup>/s July 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	14	e9.5	e8.5	e12	17	14	53	100	2.7	.60	.51
2	1.6	25	e10	e8.5	e12	13	18	49	90	1.7	.57	.51
3	1.4	21	e10	e8.0	12	14	12	77	100	2.1	.51	.59
4	1.5	12	e9.5	e7.5	e11	15	11	175	70	2.6	1.2	.62
5	1.0	15	e9.0	e8.0	e12	15	10	75	57	2.0	3.5	1.3
6	.82	12	e9.0	e8.5	e12	17	22	46	52	2.6	1.8	1.2
7	.74	13	e8.5	e8.5	e13	17	19	92	50	1.4	1.6	.72
8	.74	14	e9.0	e9.0	15	20	18	75	65	2.2	1.5	.61
9	.66	13	e9.5	e8.5	17	25	17	43	46	.83	1.4	.57
10	.84	9.8	e11	e9.0	17	26	21	58	33	1.3	1.7	.52
11	.76	10	e12	e8.5	16	29	25	93	31	2.0	1.4	.80
12	.76	10	e10	e7.5	15	20	23	148	27	1.0	.95	1.1
13	.63	15	e9.5	e8.0	14	18	9.5	206	26	.59	.70	.91
14	.64	14	e9.0	e8.5	13	25	2.0	248	26	.47	.68	.63
15	.86	14	e8.5	e9.0	e13	30	1.8	297	26	.37	.70	.63
16	3.6	14	e8.0	e9.0	e14	33	2.4	379	20	.40	.54	.60
17	4.8	13	e8.0	e9.0	e15	39	4.6	452	32	.55	.50	.76
18	5.0	13	e8.5	e9.5	17	59	11	449	40	.68	.68	1.3
19	5.2	12	e7.5	e9.0	20	43	3.2	411	27	.92	.92	1.2
20	5.0	11	e6.5	e9.0	24	40	2.5	386	20	1.3	1.0	1.2
21	7.1	8.7	e7.0	e9.5	18	38	11	343	22	2.0	1.4	2.0
22	6.8	8.5	e7.5	e10	19	38	20	307	17	2.1	.70	1.1
23	6.5	e10	e7.5	e9.5	14	41	40	291	9.9	2.4	.65	.83
24	6.4	e9.0	e7.5	e9.5	21	46	33	260	7.1	3.8	.49	.83
25	7.9	e9.5	e7.5	e9.0	17	39	13	274	7.4	.96	.65	.80
26	11	e9.0	e7.0	e10	13	42	28	256	4.7	1.1	4.6	.80
27	12	e8.5	e7.5	e11	22	53	42	241	3.0	1.4	.76	.76
28	11	e9.0	e8.0	e11	17	43	68	200	1.7	.91	.85	.76
29	19	e9.5	e8.5	e10	---	59	67	158	1.4	.68	.64	.96
30	11	e9.0	e8.0	e10	---	30	65	131	2.2	.69	.57	.82
31	21	---	e8.0	e11	---	21	---	119	---	.59	.47	---
TOTAL	157.55	365.5	266.5	281.5	435	965	634.0	6392	1014.4	44.34	34.23	25.94
MEAN	5.08	12.2	8.60	9.08	15.5	31.1	21.1	206	33.8	1.43	1.10	.86
MAX	21	25	12	11	24	59	68	452	100	3.8	4.6	2.0
MIN	.63	8.5	6.5	7.5	11	13	1.8	43	1.4	.37	.47	.51
AC-FT	313	725	529	558	863	1910	1260	12680	2010	88	68	51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1993, BY WATER YEAR (WY)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
MEAN	10.5	16.0	13.7	13.7	19.0	22.0	34.7	156	79.2	7.01	5.27	2.89																						
MAX	59.9	44.0	39.9	35.7	42.1	60.0	187	989	583	76.8	68.4	22.8																						
(WY)	1985	1985	1984	1986	1986	1986	1984	1984	1983	1984	1984	1983																						
MIN	2.50	4.66	3.41	3.62	7.82	5.20	.73	.92	.39	.21	.17	.22																						
(WY)	1965	1977	1991	1991	1978	1963	1967	1977	1977	1961	1976	1962																						

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1961 - 1993

	1992	1993	1961-1993
ANNUAL TOTAL	3955.25	10615.96	
ANNUAL MEAN	10.8	29.1	31.8
HIGHEST ANNUAL MEAN			172
LOWEST ANNUAL MEAN			4.37
HIGHEST DAILY MEAN	196	452	1620
LOWEST DAILY MEAN	.26	.37	.00
ANNUAL SEVEN-DAY MINIMUM	.51	.56	.05
ANNUAL RUNOFF (AC-FT)	7850	21060	23030
10 PERCENT EXCEEDS	21	58	62
50 PERCENT EXCEEDS	7.5	9.5	9.6
90 PERCENT EXCEEDS	.58	.70	.65

e Estimated



## SEVIER LAKE BASIN

291

10215700 OAK CREEK NEAR SPRING CITY, UT

LOCATION.--Lat 39°26'52", long 111°25'29", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 1, T. 16 S., R. 4 E., Sanpete County, on right bank about 400 ft upstream from powerplant diversion, 0.8 mi downstream from South Fork, and 4.5 mi southeast of Spring City.

DRAINAGE AREA.--8.35 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to September 1974, June 1979 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,400 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion above station. Flow includes discharge of Spring City tunnel (transmountain diversion from Colorado River Basin).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300 ft<sup>3</sup>/s July 23, 1965, gage height, 3.75 ft from floodmark, from rating curve extended above 75 ft<sup>3</sup>/s; minimum, 0.93 ft<sup>3</sup>/s Mar. 6, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 25	2343	76	2.41	June 15	2003	*84	*2.48
May 30	2048	81	2.46				

Minimum daily discharge, 2.7 ft<sup>3</sup>/s Feb. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	e3.6	e3.4	e3.1	e3.1	3.0	3.4	5.3	74	32	11	7.4
2	3.7	e3.4	e3.5	e3.0	e3.1	2.9	3.5	6.0	73	31	11	7.3
3	3.7	e3.2	e3.3	e2.9	e2.9	3.6	3.2	7.1	67	31	10	7.2
4	3.7	e3.1	e3.2	e2.8	e2.7	3.5	3.4	8.0	59	30	11	7.1
5	3.7	e3.4	e3.3	e2.9	e2.9	2.9	3.5	6.5	55	28	11	7.2
6	3.7	e3.3	e3.3	e3.0	e3.1	2.9	3.2	6.0	52	27	10	7.1
7	3.4	e3.7	e3.2	e3.1	e3.0	3.0	3.2	6.0	46	26	10	7.0
8	3.5	e3.7	e3.3	e3.2	e3.0	3.2	3.3	5.9	40	26	10	6.9
9	3.6	e3.6	e3.4	e3.2	e3.1	3.1	3.5	5.8	38	25	13	6.8
10	3.6	e3.5	e3.3	e3.1	e3.0	3.2	3.6	6.6	43	25	13	6.7
11	3.7	e3.4	e3.4	e3.0	e3.1	3.1	3.6	8.0	48	24	11	6.7
12	3.5	e3.4	e3.3	e2.9	e3.2	3.1	3.6	11	57	22	9.9	6.6
13	3.7	e3.8	e3.3	e3.0	e3.2	3.1	3.3	14	62	21	9.6	6.8
14	e3.9	e3.9	e3.2	e3.1	e3.1	3.2	3.3	17	67	19	9.4	6.8
15	e4.0	e3.9	e3.3	e3.1	e2.9	3.2	3.4	19	70	18	9.2	6.5
16	e3.9	e3.8	e3.2	e3.1	e3.0	3.1	3.5	22	69	17	9.0	6.6
17	e3.8	e3.7	e3.3	e3.2	e3.2	3.2	3.7	26	66	17	8.9	7.0
18	e3.8	e3.8	e3.4	e3.1	e3.1	3.3	3.9	36	58	16	8.8	7.2
19	e3.8	e3.7	e3.2	e3.2	3.1	3.2	3.5	29	59	15	8.9	6.8
20	e3.5	e3.6	e3.2	e3.1	3.1	3.2	3.7	51	63	15	8.9	6.5
21	e3.4	e3.7	e3.1	e3.2	3.1	3.2	4.1	60	63	14	8.6	6.4
22	e3.3	e3.6	e3.0	e3.2	3.1	3.3	4.7	58	60	14	8.3	6.2
23	e3.2	e3.4	e2.8	e3.1	3.1	3.5	4.9	64	56	14	8.2	6.2
24	e3.1	e3.3	e2.9	e3.1	3.1	3.7	4.5	65	47	15	8.1	6.1
25	e3.5	e3.2	e3.0	e3.3	3.0	3.7	4.2	69	44	13	8.0	5.9
26	e3.2	e3.3	e3.0	e3.4	3.0	3.9	4.8	70	42	13	8.0	5.8
27	e3.1	e3.2	e2.9	e3.3	2.9	3.6	5.5	61	43	12	7.8	5.9
28	e3.4	e3.3	e3.1	e3.5	3.0	3.4	5.8	48	39	12	7.7	5.9
29	e3.7	e3.2	e3.0	e3.3	---	3.4	5.8	58	36	12	7.6	5.7
30	e3.8	e3.3	e3.1	e3.2	---	3.2	5.5	63	33	11	7.4	5.6
31	e3.7	---	e3.1	e3.1	---	3.2	---	76	---	11	7.5	---
TOTAL	111.3	105.0	99.0	96.8	85.2	101.1	119.1	988.2	1629	606	290.8	197.9
MEAN	3.59	3.50	3.19	3.12	3.04	3.26	3.97	31.9	54.3	19.5	9.38	6.60
MAX	4.0	3.9	3.5	3.5	3.2	3.9	5.8	76	74	32	13	7.4
MIN	3.1	3.1	2.8	2.8	2.7	2.9	3.2	5.3	33	11	7.4	5.6
AC-FT	221	208	196	192	169	201	236	1960	3230	1200	577	393

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965-74, 1980-93, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	5.25	4.61	4.13	3.76	3.68	3.71	5.16	25.8	44.6	16.4	7.87	6.06												
MAX	9.05	7.70	6.59	5.53	5.78	5.63	11.5	61.3	92.6	52.5	17.0	10.9												
(WY)	1984	1984	1984	1984	1987	1987	1985	1984	1983	1983	1983	1983												
MIN	2.98	2.88	3.11	2.66	2.35	2.01	2.87	11.4	12.2	5.95	4.69	3.82												
(WY)	1965	1965	1965	1969	1969	1969	1970	1991	1966	1966	1972	1966												

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1965-74, 1980-93

ANNUAL TOTAL	2828.6	4429.4	
ANNUAL MEAN	7.73	12.1	
HIGHEST ANNUAL MEAN			11.0
LOWEST ANNUAL MEAN			20.6
HIGHEST DAILY MEAN	37	May 27	145
LOWEST DAILY MEAN	2.8	Dec 23	1.9
ANNUAL SEVEN-DAY MINIMUM	3.0	Dec 21	2.0
ANNUAL RUNOFF (AC-FT)	5610	8790	7940
10 PERCENT EXCEEDS	23	42	26
50 PERCENT EXCEEDS	4.2	3.7	5.1
90 PERCENT EXCEEDS	3.3	3.1	3.2

e Estimated

## SEVIER LAKE BASIN

10215900 MANTI CREEK BELOW DUGWAY CREEK, NEAR MANTI, UT

LOCATION.--Lat 39°15'33", long 111°34'45", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 9, T. 18 S., R. 3 E., Sanpete County, Hydrologic Unit 16030004, on right bank 200 ft downstream from a side road bridge 0.6 mi upstream from upper powerplant, 2.3 mi east of cattle guard at Manti-LaSal forest boundary, and 3.5 mi east of Manti.

DRAINAGE AREA.--26.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to September 1974; October 1978 to current year.

REVISED RECORDS.--WRD UT-81-1: 1979, 1980 (M).

GAGE.--Water-stage recorder. Elevation of gage is 6,800 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Records do not include flow diverted around station in an 8-inch pipeline, for culinary water for the city of Manti, and generation of power at the upper powerplant. Records include flow of a small transmountain diversion from San Rafael River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 682 ft<sup>3</sup>/s June 9, 1973, gage height, 2.93 ft; minimum, 0.9 ft<sup>3</sup>/s Nov. 3, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 3	2205	61	3.87	May 24	2140	*390	*5.22

Minimum daily discharge, 2.9 ft<sup>3</sup>/s Feb. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	4.7	3.6	3.3	3.3	3.0	8.2	16	e210	e74	21	13
2	5.0	4.8	3.6	e3.2	3.3	3.2	8.6	20	e200	e74	21	13
3	4.6	4.3	3.5	e3.1	e3.2	4.4	7.6	31	e180	e74	22	12
4	4.6	e4.2	3.4	e3.0	e3.0	4.3	7.8	39	e150	e70	22	12
5	4.6	e4.5	3.5	3.1	e3.3	4.1	8.2	27	e140	e62	21	12
6	4.8	e4.4	3.5	3.2	3.4	3.4	7.3	24	e130	e52	20	12
7	4.9	e4.6	3.4	3.3	3.3	4.0	6.9	27	e110	e48	20	11
8	5.1	4.6	3.5	3.4	3.3	4.6	7.4	22	e100	e48	20	11
9	4.9	4.3	3.9	3.4	3.4	4.9	8.5	22	e96	44	19	11
10	5.0	e4.0	3.5	3.3	3.3	5.2	9.0	28	e120	41	21	11
11	4.9	e3.6	3.6	3.2	3.5	4.9	9.7	41	e120	40	e19	11
12	5.1	e3.6	3.5	e3.1	3.5	4.5	9.3	55	e140	39	e18	10
13	5.6	e3.7	3.5	e3.2	e3.5	4.6	7.6	69	e150	37	e18	11
14	6.1	e3.8	3.3	3.3	3.3	3.9	8.0	68	e160	35	e17	11
15	6.3	e3.8	3.7	3.3	e3.3	4.4	8.0	90	e170	32	e17	10
16	6.2	3.5	3.4	3.3	e3.4	4.7	8.2	98	e170	31	e17	10
17	5.9	3.3	3.5	3.4	3.5	5.1	10	102	e160	29	16	12
18	5.9	3.4	3.6	3.3	3.1	6.1	12	137	e140	29	16	12
19	5.9	3.4	3.4	3.4	e3.0	5.6	11	146	e140	30	18	11
20	5.3	e3.2	3.4	3.3	e2.9	5.9	12	155	e150	27	17	11
21	5.0	e3.5	3.3	3.4	e3.0	6.4	14	179	e150	26	16	11
22	4.7	e3.3	3.2	3.4	e3.1	7.2	17	176	e150	25	15	10
23	4.6	e3.2	3.0	e3.3	3.1	8.6	17	186	e150	25	15	10
24	4.2	e3.1	3.1	e3.3	3.0	8.9	15	e186	e130	26	14	10
25	5.1	e3.1	3.2	e3.5	3.1	9.6	13	e200	e110	24	14	10
26	4.4	e3.5	3.2	3.6	e3.0	11	14	e210	e92	24	15	9.9
27	4.2	e3.4	3.1	3.6	3.0	9.6	17	e200	e96	23	14	10
28	4.4	e3.5	3.3	3.8	3.0	7.7	19	e190	e88	23	14	9.9
29	4.7	e3.4	3.2	3.5	---	8.1	19	e200	e84	22	14	9.5
30	5.1	3.5	3.3	3.4	---	7.4	17	e210	e76	23	13	9.6
31	5.0	---	3.3	3.3	---	6.9	---	e220	---	22	13	---
TOTAL	157.9	113.2	105.5	103.2	90.2	182.2	337.3	3374	4062	1179	537	326.9
MEAN	5.09	3.77	3.40	3.33	3.22	5.88	11.2	109	135	38.0	17.3	10.9
MAX	6.3	4.8	3.9	3.8	3.5	11	19	220	210	74	22	13
MIN	4.2	3.1	3.0	3.0	2.9	3.0	6.9	16	76	22	13	9.5
AC-FT	313	225	209	205	179	361	669	6690	8060	2340	1070	648

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965-74, 1979-93, BY WATER YEAR (WY)

	1965-74	1979-93	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	8.44	6.72	5.25	4.74	4.62	6.09	18.6	99.1	139	42.4	17.1	10.8
MAX	18.6	12.5	9.85	8.79	8.46	12.3	87.4	232	317	174	42.3	23.5
(WY)	1984	1985	1984	1984	1984	1986	1985	1984	1983	1983	1983	1983
MIN	4.32	3.77	3.35	3.05	3.13	3.22	5.46	47.1	32.2	11.9	5.75	4.47
(WY)	1990	1993	1979	1981	1967	1991	1967	1990	1966	1966	1966	1966

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1965-74, 1979-93

ANNUAL TOTAL	6385.4	10568.4	
ANNUAL MEAN	17.4	29.0	
HIGHEST ANNUAL MEAN			30.3
LOWEST ANNUAL MEAN			61.0
HIGHEST DAILY MEAN	142	May 15	14.1
LOWEST DAILY MEAN	2.9	Feb 18	44.4
ANNUAL SEVEN-DAY MINIMUM	3.1	Feb 14	2.4
ANNUAL RUNOFF (AC-FT)	12670		2.6
10 PERCENT EXCEEDS	51		21960
50 PERCENT EXCEEDS	6.1		78
90 PERCENT EXCEEDS	3.3		8.6
			4.0

e Estimated

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LOCATION.--Lat 39°09'19", long 111°52'37", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 14, T. 19 S., R. 1 W., Sanpete County, Hydrologic Unit 16030003, on left bank 1,000 ft downstream from San Pitch River and 3.2 mi west of Gunnison.

PERIOD OF RECORD.--March 1912 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,025 ft above sea level, from topographic map. Prior to Oct. 28, 1938, at same site at datum 0.36 ft higher. April 16, 1986 to June 6, 1989 at site approximately 1 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by reservoirs and many diversions for irrigation above station. Most of flow diverted above station during irrigation season.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,400 ft<sup>3</sup>/s May 29, 1984; minimum, 5.6 ft<sup>3</sup>/s July 17-21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1810 ft<sup>3</sup>/s May 30, gage height, 7.65 ft; minimum daily discharge, 40 ft<sup>3</sup>/s July 12.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	127	155	180	205	337	263	129	1710	85	127	83
2	91	140	159	184	211	331	218	124	1620	78	98	100
3	90	145	164	190	206	327	209	117	1550	78	87	81
4	85	130	172	e190	194	326	198	171	1460	70	83	104
5	77	123	169	e185	194	328	193	164	1320	72	86	143
6	78	122	169	e185	212	335	180	108	1310	70	81	167
7	79	121	163	186	221	341	183	123	1320	67	78	172
8	81	121	168	204	227	347	183	153	1320	64	81	172
9	83	124	174	209	319	357	181	138	1270	57	102	164
10	79	120	181	214	369	361	163	145	1240	45	119	168
11	76	116	187	218	345	368	159	168	1170	50	121	165
12	73	119	191	208	346	378	150	218	1090	40	113	146
13	72	124	188	194	342	319	140	278	1130	46	104	142
14	75	132	183	203	330	268	118	385	1080	64	100	107
15	75	149	176	213	318	230	116	460	851	87	93	68
16	70	177	e173	219	321	199	166	621	733	85	98	65
17	78	169	e170	224	331	119	138	704	777	69	91	73
18	75	177	174	225	325	145	125	767	842	52	85	111
19	72	189	176	229	337	175	108	802	479	55	86	112
20	74	186	e173	228	406	148	128	865	375	61	81	86
21	80	181	e180	226	438	173	133	1040	368	61	77	e68
22	81	177	e180	229	415	225	130	1050	318	58	73	e70
23	83	175	e176	227	386	237	126	1090	273	60	66	136
24	85	174	e176	216	371	243	87	1170	233	68	50	236
25	87	170	e179	214	364	232	91	1180	212	99	51	240
26	89	160	e180	210	349	231	73	1120	200	132	55	179
27	92	155	e182	205	335	250	82	1090	180	150	63	121
28	96	151	e180	202	335	279	98	1290	129	182	67	119
29	97	159	e180	200	---	405	104	1600	96	181	72	126
30	109	162	e182	203	---	364	123	1760	91	163	75	135
31	118	---	184	205	---	295	---	1750	---	149	77	---
TOTAL	2617	4475	5444	6425	8752	8673	4366	20780	24747	2598	2640	3859
MEAN	84.4	149	176	207	313	280	146	670	825	83.8	85.2	129
MAX	118	189	191	229	438	405	263	1760	1710	182	127	240
MIN	70	116	155	180	194	119	73	108	91	40	50	65
AC-FT	5190	8880	10800	12740	17360	17200	8660	41220	49090	5150	5240	7655

MEAN	194	236	267	271	332	359	288	378	367	118	110	134
MAX	783	760	1028	868	1141	1443	1670	3606	4308	1624	591	499
(WY)	1984	1984	1984	1984	1984	1984	1984	1984	1983	1983	1983	1983
MIN	27.1	56.0	96.7	100	97.2	74.0	70.7	56.5	41.0	25.7	16.2	17.2
(WY)	1935	1935	1932	1935	1935	1935	1966	1961	1940	1960	1934	1934

ANNUAL TOTAL	45655		95376				
ANNUAL MEAN	125		261			254	
HIGHEST ANNUAL MEAN						1346	1984
LOWEST ANNUAL MEAN						86.5	1935
HIGHEST DAILY MEAN	579	May 27	1760	May 30	5400		May 29 1984
LOWEST DAILY MEAN	19	Jul 10	40	Jul 12		6.0	Jul 18 1977
ANNUAL SEVEN-DAY MINIMUM	20	Aug 11	52	Jul 8		6.6	Jul 14 1977
ANNUAL RUNOFF (AC-FT)	90560		189200			184000	
10 PERCENT EXCEEDS	195		447			473	
50 PERCENT EXCEEDS	110		170			187	
90 PERCENT EXCEEDS	27		73			60	

e Estimated

## SEVIER LAKE BASIN

10218500 SEVIER BRIDGE RESERVOIR NEAR JUAB, UT

LOCATION.--Lat 39°22'20", long 112°01'57", in NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 1, T. 17 S., R. 2 W., Juab County, Hydrologic Unit 16030003, at Sevier Bridge Dam on Sevier River, 9.0 mi northeast of Scipio.

DRAINAGE AREA.--5,155 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1914 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Staff gage below gage height 60 ft and wire-weight gage above, at left end of dam. Datum of gage is 4,937.51 ft above sea level.

REMARKS.--Reservoir was formed by a 30-ft earthfill dam. Storage began about 1904. Dam ultimately raised to 90 ft by June 1916. Capacity, 236,000 acre-ft between elevation 4,946.9 ft and elevation 5,017.5 ft (top of flashboard on spillway). No dead storage. Water is used for irrigation.

COOPERATION.--Elevation record provided by Sevier River Commissioner. Revised capacity table, based on Soil Conservation Service survey in 1961, used since Oct. 1, 1962.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 271,600 acre-ft, June 21-24, 1983; elevation, 5,020.5 ft; no storage at times in 1927-28, 1930-36, 1951, 1960-61.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 127,600 acre-ft, June 29, elevation, 5,004.7 ft; minimum contents observed, 32,150 acre-ft, Oct. 1, elevation, 4,975.3 ft.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30 . . . . .	--	*31,890	--
Oct. 31 . . . . .	--	*37,920	+6,030
Nov. 30 . . . . .	--	*46,920	+9,000
Dec. 31 . . . . .	--	*57,210	+10,290
CAL YR 1992 . . . . .	--	--	-35,130
Jan. 31 . . . . .	--	*71,020	+13,810
Feb. 28 . . . . .	--	*91,320	+20,300
Mar. 31 . . . . .	--	*112,200	+20,880
Apr. 30 . . . . .	--	*105,300	-6,900
May 31 . . . . .	--	*107,300	+2,000
June 30 . . . . .	--	*126,400	+19,100
July 31 . . . . .	--	*100,200	-26,200
Aug. 31 . . . . .	--	*78,000	-22,200
Sept. 30 . . . . .	--	*80,300	+2,300
WTR YR 1993 . . . . .	--	--	+48,410

(\*) No end-of-month gage height reading, contents interpolated.

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LOCATION.—Lat 39°22'29", long 112°02'20", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 35, T. 16 S., R. 2 W., Juab County, Hydrologic Unit 16030005, on right bank 0.5 mi downstream from Sevier Bridge Dam and 11.6 mi southwest of Juab.

PERIOD OF RECORD.--September 1911 to current year.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Sevier Bridge Reservoir (see station 10218500).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft<sup>3</sup>/s June 24, 25, gage height, 7.91 ft; minimum daily discharge, 0.96 ft<sup>3</sup>/s Oct. 1.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	.97	1.2	e1.3	1.5	1.2	1.8	998	368	701	240	227
2	.98	1.2	1.2	e1.2	1.5	1.2	2.0	810	301	698	443	228
3	1.0	1.0	1.3	e1.1	1.4	1.2	1.8	807	299	704	689	201
4	1.0	1.0	1.2	e1.1	1.5	1.2	1.9	809	296	698	686	153
5	1.0	1.0	1.3	e1.0	1.5	1.3	2.0	804	297	696	685	153
6	1.1	1.0	1.3	e1.1	1.3	1.3	1.9	802	296	697	683	154
7	1.0	1.0	1.3	e1.2	1.2	1.4	1.8	804	300	694	680	89
8	1.0	1.0	1.4	e1.3	1.2	1.6	1.8	802	300	690	679	45
9	1.1	1.0	1.5	e1.4	1.3	1.6	1.9	796	229	689	674	45
10	1.0	1.0	1.4	e1.4	1.3	1.7	1.8	570	64	687	671	46
11	1.0	1.0	1.4	e1.3	1.3	1.9	1.9	254	64	688	818	46
12	1.0	1.0	1.6	e1.2	1.3	1.8	2.0	70	272	684	712	46
13	1.0	1.0	1.2	e1.2	1.2	1.9	1.9	70	375	684	42	46
14	1.0	1.0	1.2	e1.2	1.2	2.0	2.0	254	377	569	44	58
15	1.0	1.1	1.3	e1.3	1.2	2.0	2.1	439	378	233	44	88
16	1.0	1.2	1.2	e1.4	1.3	2.0	2.1	439	382	235	44	88
17	1.0	1.3	1.3	e1.4	1.2	2.0	2.1	441	384	234	60	47
18	1.0	1.5	e1.3	e1.4	1.2	1.9	2.1	442	385	235	85	3.9
19	1.0	1.5	e1.2	e1.4	1.6	1.8	2.1	443	386	235	84	3.8
20	1.1	1.5	e1.1	e1.4	2.1	1.8	218	442	387	235	84	3.8
21	1.1	1.5	e1.2	e1.5	1.5	1.8	378	443	388	236	84	3.8
22	1.2	1.5	e1.3	1.6	1.4	1.8	382	448	389	237	84	3.8
23	1.2	1.5	e1.4	1.5	1.4	1.8	386	446	674	238	84	3.8
24	1.2	1.5	e1.3	1.4	1.5	1.9	388	443	1180	237	527	3.8
25	1.3	1.5	e1.2	1.4	1.3	1.8	591	445	1010	237	842	3.5
26	1.1	1.5	e1.2	1.4	1.2	1.8	803	447	706	238	595	3.3
27	1.1	1.5	e1.4	1.4	1.2	2.0	810	446	704	238	348	3.3
28	1.2	1.5	e1.4	1.4	1.2	1.9	812	447	703	238	435	3.0
29	1.1	1.4	e1.3	1.4	---	2.0	811	446	706	238	436	2.5
30	1.3	1.2	e1.2	1.4	---	1.9	857	447	703	240	433	2.5
31	1.2	---	e1.2	1.4	---	1.8	---	448	---	240	331	---
TOTAL	33.24	36.87	40.0	41.1	38.0	53.3	6473.0	16202	13303	13603	12346	1804.8
MEAN	1.07	1.23	1.29	1.33	1.36	1.72	216	523	443	439	398	60.2
MAX	1.3	1.5	1.6	1.6	2.1	2.0	857	998	1180	704	842	228
MIN	.96	.97	1.1	1.0	1.2	1.2	1.8	70	64	233	42	2.5
AC-FT	66	73	79	82	75	106	12840	32140	26390	26980	24490	3580

MEAN	65.4	34.4	35.2	61.0	59.0	116	302	747	604	547	363	173
MAX	640	326	757	1295	1184	1535	1782	3135	4178	3293	1599	737
(WY)	1923	1913	1986	1984	1984	1983	1984	1984	1983	1983	1983	1923
MIN	1.00	.60	.45	.76	.94	1.01	2.00	371	138	65.4	25.0	1.34
(WY)	1961	1965	1965	1965	1965	1965	1941	1934	1964	1934	1934	1961

ANNUAL TOTAL	61154.92		63974.31				
ANNUAL MEAN	167		175			260	
HIGHEST ANNUAL MEAN						1322	1984
LOWEST ANNUAL MEAN						94.2	1961
HIGHEST DAILY MEAN	804	Apr 16	1180	Jun 24		4920	Jun 25 1983
LOWEST DAILY MEAN	.91	Sep 30	.96	Oct 1		.00	Mar 7 1918
ANNUAL SEVEN-DAY MINIMUM	.95	Sep 27	1.0	Oct 10		.00	Apr 9 1990
ANNUAL RUNOFF (AC-FT)	121300		126900			188400	
10 PERCENT EXCEEDS	573		686			762	
50 PERCENT EXCEEDS	2.1		1.9			30	
90 PERCENT EXCEEDS	1.1		1.1			2.0	

e Estimated

## SEVIER LAKE BASIN

10219200 CHICKEN CREEK NEAR LEVAN, UT

LOCATION.--Lat 39°33'00", long 111°49'31", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 14 S., R. 1 E., Juab County, Hydrologic Unit 16030005, on left bank 125 ft upstream from county road culvert, 50 ft upstream from diversion structure, 0.5 mi upstream from mouth of canyon, and 2.0 mi east of Levan.

DRAINAGE AREA.--27.9 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,540 ft above sea level, from topographic map. Prior to Jan. 18, 1978 at site 350 ft downstream at different datum. Jan. 18, 1978 to June 19, 1986 at site 600 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 390 ft<sup>3</sup>/s Sept. 8, 1981, gage height, 5.70 ft, from rating curve extended above 250 ft<sup>3</sup>/s on basis of velocity-area study; no flow Feb. 11, 14, 1966, minimum daily discharge, no flow Dec. 24, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 16	1700	*32	*21.68	No other peak greater than base discharge.			
Minimum daily discharge, 0.24 ft <sup>3</sup> /s Oct. 19.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.60	e.39	e.37	e.58	e1.0	6.4	18	14	6.8	2.8	2.3
2	.26	.74	e.40	e.39	e.65	e1.1	6.9	19	15	6.6	2.6	2.2
3	.31	.78	e.37	e.38	e.68	e1.1	7.0	19	15	6.4	2.8	2.1
4	.36	.61	e.32	e.32	e.68	e1.1	6.9	21	15	4.4	2.8	2.1
5	.40	.61	e.36	e.26	e.58	1.1	7.0	21	14	4.8	3.0	2.1
6	.38	.56	e.34	e.33	e.64	1.1	7.1	23	14	4.5	2.8	1.8
7	.41	.55	e.43	e.35	e.70	1.1	7.0	31	14	5.5	2.8	1.8
8	.43	.56	e.43	e.34	e.79	1.3	7.0	30	14	5.9	3.4	1.8
9	.41	.57	e.42	e.36	e.89	1.6	7.0	28	14	5.5	3.4	1.8
10	.39	.51	e.41	e.35	e.97	1.8	7.4	27	14	5.5	3.1	1.7
11	.36	e.45	e.44	e.32	e1.1	2.3	8.2	27	13	5.3	3.0	1.7
12	.30	e.40	e.47	e.29	e1.2	1.9	8.2	28	12	5.3	2.6	1.6
13	.33	.47	e.42	e.33	e1.2	1.8	8.2	29	12	5.1	2.4	1.7
14	.26	.48	e.36	e.32	e1.1	1.9	7.9	30	12	5.1	2.5	1.8
15	.27	.49	e.32	e.35	e1.0	2.7	8.1	31	11	4.9	2.5	1.9
16	.28	.47	e.34	e.39	e.97	3.5	8.5	31	11	4.8	2.4	1.9
17	.27	.42	e.40	e.45	e.92	4.0	9.1	30	9.9	4.7	2.5	2.2
18	.27	.38	e.37	e.50	e1.0	5.2	9.9	29	8.8	4.7	2.7	2.3
19	.24	.38	e.35	e.53	e1.4	5.5	10	27	9.1	4.5	2.6	2.3
20	.25	.44	e.34	e.54	e1.5	5.5	11	26	8.9	4.1	2.6	2.0
21	.25	.40	e.41	e.55	e1.4	5.1	12	25	8.2	4.0	2.8	1.9
22	.33	e.38	e.43	e.59	e1.3	5.1	14	23	7.8	4.0	2.6	1.9
23	.36	.38	e.43	e.59	e1.2	5.3	15	22	7.5	3.9	2.4	1.8
24	.38	e.35	e.40	e.57	e1.1	6.2	16	21	7.4	4.1	2.4	1.8
25	.44	e.33	e.37	e.51	e.97	6.8	15	20	7.3	3.7	2.3	1.8
26	.41	e.34	e.36	e.51	e.88	7.3	16	20	7.1	3.5	2.6	1.9
27	.38	e.37	e.36	e.52	e.94	7.2	18	19	7.0	3.4	2.5	1.8
28	.44	e.38	e.42	e.52	e1.0	6.9	18	18	7.0	3.3	2.4	1.7
29	.43	e.34	e.46	e.52	---	6.8	18	17	6.8	3.2	2.3	1.7
30	.78	e.37	e.40	e.46	---	6.6	18	16	6.8	3.2	2.3	1.6
31	1.1	---	e.36	e.53	---	6.3	---	15	---	3.0	2.4	---
TOTAL	11.78	14.11	12.08	13.34	27.34	116.2	318.8	741	323.6	143.7	82.3	57.0
MEAN	.38	.47	.39	.43	.98	3.75	10.6	23.9	10.8	4.64	2.65	1.90
MAX	1.1	.78	.47	.59	1.5	7.3	18	31	15	6.8	3.4	2.3
MIN	.24	.33	.32	.26	.58	1.0	6.4	15	6.8	3.0	2.3	1.6
AC-FT	23	28	24	26	54	230	632	1470	642	285	163	113

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1993, BY WATER YEAR (WY)

	MEAN	2.60	2.20	1.80	1.83	2.19	4.15	16.2	35.6	15.4	6.11	3.97	3.01
MAX	8.16	6.97	6.98	6.12	5.56	15.9	90.1	264	115	24.4	14.2	10.5	
(WY)	1984	1984	1984	1984	1986	1983	1984	1984	1983	1983	1983	1983	1983
MIN	.22	.30	.023	.020	.016	.34	2.85	1.61	.89	.43	.56	.25	
(WY)	1989	1990	1990	1990	1990	1988	1977	1992	1992	1992	1992	1988	

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1963 - 1993

ANNUAL TOTAL	336.68	1861.25		
ANNUAL MEAN	.92	5.10		
HIGHEST ANNUAL MEAN			7.95	
LOWEST ANNUAL MEAN			41.2	1984
HIGHEST DAILY MEAN	4.0	Apr 6	31	May 7
LOWEST DAILY MEAN	.02	Jul 22	.24	Oct 19
ANNUAL SEVEN-DAY MINIMUM	.16	Jul 20	.26	Oct 15
ANNUAL RUNOFF (AC-FT)	668		3690	
10 PERCENT EXCEEDS	2.0		15	
50 PERCENT EXCEEDS	.57		1.9	
90 PERCENT EXCEEDS	.34		.36	
				5760
				17
				2.8
				.67

e Estimated

## SEVIER LAKE BASIN

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10224000 SEVIER RIVER NEAR LYNN DYLL, UT

LOCATION.--Lat 39°28'55", long 112°23'35", in NW1/4, NE1/4, SE1/4 sec. 27, T. 15 S., R. 5 W., Millard County, Hydrologic Unit 16030005, on right bank 1.6 mi downstream from highway bridge and 3.5 mi southwest of Lynndyl.

DRAINAGE AREA.--5,966 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1914 to October 1919, October 1942 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to Oct. 1, 1979 at site 80 ft upstream. Prior to Apr. 23, 1991 at site 80 ft downstream. Elevation of gage is 4,660 ft above sea level, by barometer.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Sevier Bridge Reservoir about 35 mi upstream (see station 10218500). Several diversions for irrigation between reservoir and station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,020 ft<sup>3</sup>/s June 15-17, 1983; minimum, 2.4 ft<sup>3</sup>/s Jan. 26, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 976 ft<sup>3</sup>/s June 26, gage height, 7.15 ft; minimum daily discharge, 14.0 ft<sup>3</sup>/s several days in February.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	55	e44	e45	e19	55	42	707	428	582	206	337
2	30	54	e46	e45	e17	54	40	852	410	584	209	221
3	33	52	e43	e42	e16	54	39	732	332	580	227	207
4	42	51	e41	e38	e14	55	36	696	321	561	501	202
5	45	51	e43	e37	e14	54	35	723	319	586	538	154
6	45	51	e42	e41	e16	55	36	720	328	590	525	139
7	46	50	e47	e45	16	56	36	733	327	585	529	141
8	47	50	e48	e48	16	58	35	725	331	596	554	124
9	47	50	53	e47	16	59	34	753	355	624	570	80
10	47	50	50	e45	17	61	33	757	342	626	569	70
11	48	49	50	e43	16	64	31	656	174	618	583	74
12	47	49	50	e39	16	70	31	390	118	605	577	62
13	48	49	e48	e41	15	75	31	171	130	559	601	50
14	47	49	e44	e39	e14	72	31	138	332	529	171	40
15	46	50	e40	e43	e14	71	34	156	319	513	80	35
16	45	50	e40	e43	e14	75	36	396	292	238	72	37
17	46	50	e47	e46	e14	75	50	401	290	177	75	74
18	46	50	e48	e44	e14	71	49	388	292	199	52	106
19	46	51	e45	e43	18	68	48	397	306	229	43	99
20	46	52	e44	e42	58	64	48	408	331	237	60	67
21	46	51	e45	e47	71	60	59	406	334	243	62	60
22	47	52	e45	e43	73	57	318	385	307	251	63	56
23	48	52	e46	e39	64	55	369	383	299	243	60	48
24	47	52	e44	e41	64	39	392	375	371	251	66	46
25	47	e42	e43	e35	69	37	401	345	816	248	151	46
26	49	e44	e43	e37	64	37	482	297	926	235	624	47
27	48	e46	e43	e36	59	38	712	344	650	197	601	46
28	48	e42	e49	e32	57	39	726	366	609	198	295	39
29	49	e43	e49	e26	---	46	718	367	547	193	339	37
30	51	e43	e44	e20	---	48	713	370	561	197	338	27
31	57	---	e44	e22	---	46	---	393	---	194	347	---
TOTAL	1421	1480	1408	1234	875	1768	5645	14930	11497	12268	9688	2771
MEAN	45.8	49.3	45.4	39.8	31.2	57.0	188	482	383	396	313	92.4
MAX	57	55	53	48	73	75	726	852	926	626	624	337
MIN	30	42	40	20	14	37	31	138	118	177	43	27
AC-FT	2820	2940	2790	2450	1740	3510	11200	29610	22800	24330	19220	5500

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1993, BY WATER YEAR (WY)

	64.6	70.5	68.8	94.8	114	179	296	609	548	466	299	108
MAX	516	469	728	1218	1134	1514	2087	3243	4702	2842	1644	497
(WY)	1985	1985	1986	1984	1984	1983	1984	1984	1983	1983	1983	1984
MIN	22.7	22.6	10.2	6.16	7.23	11.2	25.9	287	116	180	64.0	20.5
(WY)	1968	1958	1963	1963	1978	1975	1952	1957	1964	1961	1965	1961

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1943 - 1993

ANNUAL TOTAL	62724.5	64985	
ANNUAL MEAN	171	178	244
HIGHEST ANNUAL MEAN			1369
LOWEST ANNUAL MEAN			103
HIGHEST DAILY MEAN	770	926	5020
LOWEST DAILY MEAN	9.0	14	4.5
ANNUAL SEVEN-DAY MINIMUM	9.4	14	4.9
ANNUAL RUNOFF (AC-FT)	124400	128900	176800
10 PERCENT EXCEEDS	523	569	635
50 PERCENT EXCEEDS	50	54	70
90 PERCENT EXCEEDS	12	35	18

e Estimated



## SEVIER LAKE BASIN

10224000 SEVIER RIVER NEAR LYNN DYLL, UT--Continued  
(National stream-quality accounting network station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1951 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1951 to September 1980, October 1980 to September 1981, continuous.  
WATER TEMPERATURES: March 1951 to September 1980, October 1980 to September 1981, continuous.

INSTRUMENTATION.--Conductance and water temperature recorder October 1980 to September 1981.

REMARKS.--Unpublished daily records of specific conductance obtained before water year 1965 were included in the determination of extremes for period of daily record and are available in files of district office.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 8,300 microsiemens Dec. 27, 1962; minimum daily, 395 microsiemens Feb. 17, 1980.

WATER TEMPERATURES: Maximum recorded, 33.0°C Aug. 23, 1981; minimum, 0.0°C on many days during winter period of most years.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	BARO- METRIC PRES- SURE (MM OF HG)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT, 1992												
14...	1110	48	1600	8.4	19.0	12.0	5.3	9.0	636	53	260	420
FEB, 1993												
03...	1215	16	3640	8.4	1.5	1.0	2.3	11.4	649	1	130	810
MAR												
25...	1145	37	2650	8.4	20.0	14.0	24	9.3	641	K1	31	690
JUN												
15...	1400	323	1800	8.4	33.5	21.5	34	8.2	640	110	280	380
SEP												
02...	1130	220	1630	8.5	24.0	19.0	37	7.9	646	51	140	410

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT, 1992											
14...	64	64	170	46	4	4.7	3	292	246	220	240
FEB, 1993											
03...	110	130	490	57	7	8.1	3	413	343	570	630
MAR											
25...	93	110	310	49	5	7.2	6	317	269	420	440
JUN											
15...	61	56	210	54	5	6.3	10	266	234	260	260
SEP											
02...	64	60	200	51	4	5.5	14	271	246	240	240

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT, 1992											
14...	0.30	14	964	926	1.31	124	0.410	--	0.010	<0.010	0.420
FEB, 1993											
03...	0.40	21	2340	2170	3.18	100	0.960	0.960	--	0.040	--
MAR											
25...	0.30	17	1660	1560	2.26	165	0.480	0.480	--	0.020	--
JUN											
15...	0.40	19	1070	1020	1.46	933	0.450	--	--	<0.010	--
SEP											
02...	0.40	20	974	979	1.32	579	0.190	--	--	<0.010	--

K Results bases on colony count outside acceptable range (non-ideal colony count).

## SEVIER LAKE BASIN

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10224000 SEVIER RIVER NEAR LYNN DYLL, UT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT, 1992 14...	0.430	0.020	0.030	0.04	--	<0.20	--	0.020	<0.010	<0.010	<0.010
FEB, 1993 03...	1.00	--	0.090	0.12	0.41	0.50	1.5	0.030	0.020	--	<0.010
MAR 25...	0.500	--	0.050	0.06	0.35	0.40	0.90	0.040	0.020	--	<0.010
JUN 15...	0.450	--	0.020	0.03	0.28	0.30	0.75	0.090	<0.010	--	<0.010
SEP 02...	0.190	--	0.020	0.03	0.28	0.30	0.49	0.020	0.030	--	<0.010

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT, 1992 14...	1110	<10	70	<3	<3	53	4
MAR, 1993 25...	1145	<10	100	<1	<10	90	30
JUN 15...	1400	<10	71	<3	<3	51	1
SEP 02...	1130	<10	84	<3	12	51	1

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
OCT, 1992 14...	<10	<1	<1	<1.0	710	<6
MAR 25...	3	<1	<1	<1.0	1300	11
JUN 15...	10	<1	<1	<1.0	850	8
SEP 02...	<10	1	<1	<1.0	880	8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	TEMPER- ATURE WATER (DEG C)	SED. SUSP. SIEVE DIAM. PERCENT FINER THAN .062 MM	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT, 1992 14...	1110	48	12.0	--	40	5.2
14...	1150	48	12.0	--	19	2.5
FEB, 1993 03...	1215	16	1.0	--	34	1.5
03...	1320	16	1.0	--	21	0.90
03...	1323	16	1.0	--	17	0.73
03...	1327	16	1.0	--	22	0.94
MAR 25...	1145	37	14.0	85	167	17
JUN 15...	1400	323	21.5	90	195	170
SEP 02...	1130	220	19.0	--	128	76

## SEVIER LAKE BASIN

10224100 OAK CREEK ABOVE LITTLE CREEK, NEAR OAK CITY, UT

LOCATION.--Lat 39°21'23", long 112°13'55", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 7, T. 17 S., R. 3 W., Millard County, Hydrologic Unit 16030005, Fish Lake National Forest, on right bank 0.3 mi upstream from a 12-inch pipeline diversion at Walker's Fork and 5.7 mi east of Oak City.

DRAINAGE AREA.--5.58 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,480 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 120 ft<sup>3</sup>/s Apr. 29, 1973, gage height, 2.21 ft; minimum, 0.03 ft<sup>3</sup>/s Dec. 31, 1967, result of freezeup.EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 17	0900	*19	*1.44	No other peak greater than base discharge.			

Minimum daily discharge, 0.18 ft<sup>3</sup>/s Oct. 1, 2.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.47	.49	e.52	e1.2	1.9	11	12	5.2	1.4	.52	.38
2	.18	.64	.49	e.54	e1.4	e1.8	11	12	4.8	1.3	.52	.37
3	.20	.48	.48	e.52	e1.3	e1.8	10	12	4.4	1.3	.51	.37
4	.21	.43	e.46	e.50	e1.3	1.9	10	14	4.1	1.3	.52	.36
5	.22	.41	.49	e.47	e1.1	1.9	11	13	4.0	1.3	.53	.36
6	.23	.41	e.47	e.48	1.2	1.9	10	13	3.7	1.2	.48	.32
7	.24	.41	.49	e.50	1.2	1.9	10	12	3.5	1.2	.46	.28
8	.24	.41	.49	e.50	1.3	2.1	9.6	12	3.5	1.1	.68	.28
9	.24	.41	.49	e.51	1.4	2.2	9.5	12	3.0	1.1	.55	.28
10	.25	.38	.50	e.50	1.4	2.3	9.6	11	2.8	1.0	.55	.28
11	.25	e.36	.53	e.48	1.4	2.6	9.9	11	2.7	.97	.52	.27
12	.26	e.37	e.56	e.45	1.4	2.6	9.9	12	2.7	.95	.49	.29
13	.27	.38	e.50	e.48	e1.2	2.6	9.6	13	2.6	.94	.47	.34
14	.26	.37	e.45	e.46	e1.2	2.7	9.3	15	2.5	.89	.47	.35
15	.25	.37	e.42	.50	e1.3	3.1	8.8	17	2.4	.84	.46	.33
16	.25	.37	e.42	.57	1.6	3.5	8.4	17	2.4	.84	.46	.35
17	.26	.37	e.52	.63	1.6	4.6	8.4	18	2.4	.81	.46	.42
18	.26	.40	e.50	.70	1.6	6.6	9.1	17	2.3	.80	.45	.38
19	.26	.41	e.48	.76	1.8	6.5	9.1	16	2.2	.75	.49	.36
20	.27	e.40	e.47	.81	1.8	6.6	9.3	15	2.1	.71	.49	.35
21	.25	e.36	e.56	.83	1.8	7.0	9.5	15	2.0	.70	.47	.33
22	.36	e.39	e.56	.92	1.8	7.6	10	14	1.9	.71	.46	.33
23	.33	e.37	e.60	e.97	1.8	8.3	11	12	1.9	.77	.45	.33
24	.32	e.36	e.54	e.98	1.8	9.7	12	11	1.8	.74	.41	.34
25	.37	e.34	e.50	e.92	e1.8	11	11	11	1.8	.68	.43	.34
26	.34	e.36	e.49	e.93	1.9	12	11	9.5	1.7	.64	.44	.34
27	.34	e.38	e.49	e.92	1.9	12	12	8.4	1.5	.62	.43	.34
28	.35	.50	e.56	e.92	1.9	12	12	7.8	1.5	.56	.39	.34
29	.37	.48	e.58	e.86	---	12	12	7.1	1.5	.55	.38	.34
30	.65	.48	e.46	e.84	---	11	12	6.3	1.5	.55	.38	.35
31	.63	---	e.46	e1.1	---	11	---	5.7	---	.55	.38	---
TOTAL	9.09	12.27	15.50	21.07	42.4	174.7	306.0	381.8	80.4	27.77	14.70	10.10
MEAN	.29	.41	.50	.68	1.51	5.64	10.2	12.3	2.68	.90	.47	.34
MAX	.65	.64	.60	1.1	1.9	12	12	18	5.2	1.4	.68	.42
MIN	.18	.34	.42	.45	1.1	1.8	8.4	5.7	1.5	.55	.38	.27
AC-FT	18	24	31	42	84	347	607	757	159	55	29	20

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1993, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
MEAN	.70	.81	.93	.92	1.23	2.76	8.75	12.9	4.48	1.12	.62	.53																	
MAX	2.64	3.09	3.03	2.37	4.43	9.68	21.2	41.5	26.1	5.58	2.59	2.25																	
(WY)	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983																	
MIN	.29	.41	.40	.49	.40	.48	1.29	1.18	.36	.22	.14	.17																	
(WY)	1993	1993	1991	1977	1977	1977	1977	1992	1992	1992	1992	1992																	

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1965 - 1993

ANNUAL TOTAL	260.81	1095.80	
ANNUAL MEAN	.71	3.00	
HIGHEST ANNUAL MEAN			2.98
LOWEST ANNUAL MEAN			10.4
HIGHEST DAILY MEAN	4.2	Apr 14	.67
LOWEST DAILY MEAN	.11	Aug 20	.11
ANNUAL SEVEN-DAY MINIMUM	.13	Jul 29	.13
ANNUAL RUNOFF (AC-FT)	517		2160
10 PERCENT EXCEEDS	1.9		8.3
50 PERCENT EXCEEDS	.44		.90
90 PERCENT EXCEEDS	.16		.39

e Estimated

## 301

LOCATION.--Lat 38°16'50", long 112°34'03", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> (revised) sec. 18, T. 29 S., R. 6 W., Beaver County, Hydrologic Unit 16030007, on left bank 4.2 mi east of Beaver.

PERIOD OF RECORD.--June to September 1906, March 1914 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above sea level, from topographic map. Prior to Mar. 30, 1914, nonrecording gage, and Mar. 30, 1914 to Oct. 15, 1937, water-stage recorder, at site 800 ft downstream at different datum. Oct. 16, 1937 to Mar. 20, 1959, at site 1,800 ft upstream at different datum. Mar. 21, 1959 to Mar. 21, 1978 at site 3,800 ft upstream at different datum. Mar. 21, 1978 to May 28, 1983, at site 1,800 ft upstream at different datum. Datum was raised 1.0 ft June 21, 1985, present location.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft<sup>3</sup>/s July 22, 1936, gage height, 7.27 ft, site and datum then in use, from rating curve extended above 500 ft<sup>3</sup>/s; minimum daily, 7.2 ft<sup>3</sup>/s Dec. 19, 1976.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 29	0015	*467	*2.60	No other peak greater than base discharge.			

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	28	e17	16	17	17	32	114	342	123	70	27
2	17	26	e17	16	17	19	36	117	317	117	70	27
3	18	22	17	e16	e17	20	35	128	298	114	70	26
4	16	18	17	e15	e17	18	36	138	257	108	69	26
5	16	18	e17	e16	e17	17	37	117	229	103	68	25
6	16	19	e17	e17	17	19	37	101	214	95	68	26
7	17	20	e17	17	18	18	35	95	191	92	68	26
8	16	20	17	16	18	21	35	91	183	90	66	25
9	17	19	17	15	19	21	37	88	172	87	66	24
10	17	19	17	16	17	22	40	95	162	84	70	25
11	17	19	17	17	17	22	41	119	164	84	66	25
12	17	e18	17	e17	17	19	50	150	179	82	63	25
13	17	19	17	e16	17	20	48	163	200	80	60	27
14	18	18	e16	17	17	20	44	201	219	80	51	32
15	18	19	e16	17	17	21	41	213	229	85	51	31
16	17	19	e16	17	17	21	41	210	235	87	50	31
17	18	18	e16	17	17	24	45	248	219	86	49	31
18	18	18	e17	17	16	31	56	281	197	84	47	31
19	18	18	e17	17	17	29	52	289	179	82	47	31
20	18	18	e15	17	17	30	55	302	171	80	48	30
21	18	e18	e14	17	22	30	62	351	169	81	32	29
22	18	e17	e14	17	16	35	66	342	174	78	31	35
23	18	e17	e14	17	16	40	78	330	171	77	30	33
24	19	e16	e14	e17	17	43	80	335	162	82	28	32
25	25	e16	e14	e17	17	42	84	357	156	75	28	30
26	20	e16	e14	e17	17	45	95	361	155	73	28	24
27	19	e16	e14	e17	16	44	104	366	146	71	28	24
28	20	e16	e16	e17	16	39	114	381	141	70	29	21
29	21	e18	16	e17	---	35	118	438	134	74	28	21
30	34	e17	15	17	---	32	117	366	128	73	29	21
31	30	---	e15	17	---	32	---	389	---	70	28	---
TOTAL	586	560	494	516	480	846	1751	7276	5893	2667	1536	821
MEAN	18.9	18.7	15.9	16.6	17.1	27.3	58.4	235	196	86.0	49.5	27.4
MAX	34	28	17	17	22	45	118	438	342	123	70	35
MIN	16	16	14	15	16	17	32	88	128	70	28	21
AC-FT	1160	1110	980	1020	952	1680	3470	14430	11690	5290	3050	1630

MEAN	23.6	21.6	19.5	18.2	18.8	22.5	54.6	171	152	62.0	36.5	25.6
MAX	41.5	47.0	37.7	27.0	27.9	44.9	117	409	638	198	98.0	63.3
(WY)	1915	1984	1984	1942	1984	1916	1943	1984	1983	1983	1983	1983
MIN	13.3	11.7	9.95	9.96	11.4	12.9	18.6	25.7	24.1	14.9	11.8	10.7
(WY)	1978	1978	1977	1977	1977	1977	1975	1977	1934	1977	1977	1977

e Estimated

## BEAVER RIVER BASIN

10237000 BEAVER RIVER AT ADAMSVILLE, UT

LOCATION.--Lat 38°15'13", long 112°45'56", in NE<sup>1</sup>/<sub>4</sub>, SW<sup>1</sup>/<sub>4</sub>, sec. 28, T. 29 S., R. 8 W., Beaver County, Hydrologic Unit 16030007, at right upstream corner of bridge on State Highway 21, 1.6 mi upstream from Indian Creek, and 1.6 mi east of Adamsville.

DRAINAGE AREA.--303 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1913 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,550 ft above sea level, from topographic map. Prior to Sept. 15, 1936, water-stage recorder and Sept. 15, 1936, to Oct. 15, 1937, nonrecording gage, at site 1.2 mi downstream at different datum. Oct. 16, 1937, to May 28, 1946, water-stage recorder at site 1.3 mi downstream at different datum. May 29, 1946, to Mar. 19, 1970, at site 1.8 mi downstream at different datum. Mar. 19, 1970, to July 25, 1979 at site 400 ft downstream at different datum. July 26, 1979, to Feb. 5, 1992, at site 50 ft upstream at same datum.

REMARKS.--Records fair, except those for Nov. 1 to Dec. 17, Dec. 29 to Jan. 7, estimated daily discharges, and flows less than 2.0 ft<sup>3</sup>/s, which are poor. One small diversion between station and Minersville Reservoir. Several ditches above station divert practically entire flow during irrigation season to supply Adamsville and Beaver irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,700 ft<sup>3</sup>/s, June 19, 20, 1983; no flow during summer and fall months in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 489 ft<sup>3</sup>/s at 0100 hrs, May 23, gage height, 5.21 ft; minimum daily discharge, 0.23 ft<sup>3</sup>/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	33	30	39	42	41	46	6.2	320	19	1.6	.44
2	.24	32	31	39	44	38	41	5.8	271	12	1.3	.42
3	.24	32	31	38	42	36	42	6.2	251	7.5	1.3	.37
4	.26	29	32	37	42	36	35	15	243	8.7	1.5	.40
5	.27	27	32	36	39	35	37	20	211	7.3	1.3	.42
6	.27	26	31	32	40	33	42	11	228	7.9	1.4	.68
7	.26	26	31	35	40	33	34	16	213	2.2	1.5	.46
8	.31	25	31	41	45	33	32	9.8	183	1.6	1.4	.39
9	.32	25	31	37	57	34	32	8.3	164	2.0	1.4	.34
10	.31	25	33	35	52	38	31	5.1	154	2.0	1.4	.36
11	.30	23	37	35	46	37	29	4.3	e146	2.4	.78	.35
12	.30	22	38	32	44	34	28	11	e138	2.2	.63	.45
13	.28	23	36	35	41	34	26	21	e131	1.2	.59	.43
14	.28	24	37	34	38	36	23	53	e123	1.3	.48	.40
15	.85	24	38	38	37	37	15	101	e115	1.1	.44	.38
16	7.8	25	38	40	43	37	11	161	e108	1.4	.43	.34
17	8.3	24	38	44	43	39	4.4	290	e100	1.1	.63	.36
18	8.2	23	e34	47	39	44	1.6	367	e92	.78	.62	.54
19	7.4	25	e30	45	45	42	1.3	243	e85	.78	.56	.46
20	8.2	28	e28	42	62	42	.63	325	e77	.68	.49	.39
21	7.1	29	e27	46	48	43	1.1	437	e69	.67	.51	.36
22	7.9	32	e26	55	47	48	1.4	424	e62	.73	.47	.33
23	8.1	32	e26	51	47	54	6.3	e380	e54	.95	.43	.33
24	10	31	e26	47	49	58	6.3	e360	e46	1.6	.38	.36
25	15	28	e27	44	47	62	4.6	365	39	1.5	.58	.49
26	13	27	e28	45	44	77	4.3	352	37	1.2	.54	.48
27	12	29	e30	46	43	86	8.9	366	37	1.1	.40	.47
28	15	30	e34	45	43	82	9.5	387	36	1.2	.32	.42
29	16	32	50	44	---	68	12	394	29	1.3	.34	.40
30	32	31	41	42	---	57	6.6	362	22	1.3	.42	.41
31	64	---	40	43	---	53	---	346	---	3.1	.43	---
TOTAL	244.72	822	1022	1269	1249	1427	572.93	5852.7	3784	97.79	24.57	12.43
MEAN	7.89	27.4	33.0	40.9	44.6	46.0	19.1	189	126	3.15	.79	.41
MAX	64	33	50	55	62	86	46	437	320	19	1.6	.68
MIN	.23	.22	.26	.32	.37	.33	.63	4.3	.22	.67	.32	.33
AC-FT	485	1630	2030	2520	2480	2830	1140	11610	7510	194	49	25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915-36, 1938-93, BY WATER YEAR (WY)

MEAN	19.2	41.3	41.6	39.1	43.4	43.5	31.9	76.4	78.3	14.9	15.6	11.1
MAX	66.9	70.1	62.7	65.6	65.5	85.8	144	622	1113	134	136	49.6
(WY)	1984	1983	1985	1969	1930	1916	1984	1984	1983	1983	1936	1936
MIN	.000	18.0	18.9	19.1	21.5	22.3	1.93	.32	.000	.000	.000	.000
(WY)	1932	1991	1991	1973	1935	1935	1935	1934	1934	1934	1931	1924

## BEAVER RIVER BASIN

303

## 10238500 MINERSVILLE RESERVOIR NEAR MINERSVILLE, UT

LOCATION.--Lat 38°13'03", long 112°50'05", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 30 S., R. 9 W., Beaver County, Hydrologic Unit 16030007, at right end of Rocky Ford Dam on Beaver River, 5.0 mi east of Minersville.

DRAINAGE AREA.--534 mi<sup>2</sup>.

PERIOD OF RECORD.--April to August 1915, November 1915 to September 1917, December 1917 to March 1921, June to September 1922, October 1937 to current year. Month-end contents only for some periods, published in WSP 1314. Published as Rockyford Reservoir near Minersville prior to October 1967.

REVISED RECORDS.--WDR UT-75-1: Drainage area.

GAGE.--Staff gage. Datum of gage is at 5,452.0 ft above sea level (levels by Utah Dept. of Natural Resources).

REMARKS.--Reservoir is formed by earthfill dam completed in 1914. Spillway rebuilt 1977. Capacity, 24,510 acre-ft between elevation 5,461.3 ft and elevation 5,504.6 ft (spillway crest), rating table in use since 1977. Capacity fall 1937 to fall 1977, 23,260 acre-ft at elevation 5,502.0 ft (spillway crest). Prior to fall of 1937, the spillway crest was at elevation 5,503.5 ft; capacity, 24,910 acre-ft. Dead storage negligible. Figures given herein represent total contents. Water is used for irrigation in vicinity of Minersville, and Milford.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 26,330 acre-ft, June 24-29, 1969, elevation, 5,504.8 ft (revised); No contents at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 21,110 acre-ft, June 24, elevation, 5,501.5 ft; minimum contents observed 2,590 acre-ft, Oct. 1.

MONTHEND ELEVATION, IN FEET, AND INSTANTANEOUS CONTENTS, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30 . . . . .	--	*2,460	--
Oct. 31 . . . . .	--	*3,660	+1,200
Nov. 30 . . . . .	--	*4,670	+1,010
Dec. 31 . . . . .	--	*6,060	+1,390
CAL YR 1992 . . . . .	--	--	-1,510
Jan. 31 . . . . .	--	*8,370	+2,310
Feb. 28 . . . . .	--	*10,520	+2,150
Mar. 31 . . . . .	5,492.4	12,920	+2,400
Apr. 30 . . . . .	--	*13,080	+160
May 31 . . . . .	--	*15,570	+2,490
June 30 . . . . .	--	*20,080	+4,510
July 31 . . . . .	--	*14,700	-5,380
Aug. 31 . . . . .	--	*9,490	-5,210
Sept. 30 . . . . .	--	*7,270	-2,220
WTR YR 1993 . . . . .	--	--	+4,810

(\*) No end-of-month gage height reading, contents interpolated.

## BEAVER RIVER BASIN

10239000 BEAVER RIVER AT ROCKY FORD DAM, NEAR MINERSVILLE, UT

LOCATION.--Lat 38°13'03", long 112°50'22", in SE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, sec. 11, T. 30 S., R. 9 W., Beaver County, Hydrologic Unit 16030007, on right bank and 0.5 mi downstream from Rocky Ford Dam and 4.8 mi east of Minersville.

DRAINAGE AREA.--535 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1913 to September 1936, April 1937 to current year.

REVISED RECORDS.--WSP 1564: 1920, 1924. WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Nov. 12, 1916. Elevation of gage is 5,400 ft above sea level, from topographic map. Prior to June 1, 1916, at site 1,500 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. One small diversion between dam and station. Flow regulated by Minersville Reservoir (formerly published as Rockyford Reservoir). Numerous diversions for irrigation and municipal use above reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,220 ft<sup>3</sup>/s, June 12, 1983, gage height, 4.74 ft, from rating curve extended above 500 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily, 0.4 ft<sup>3</sup>/s, Mar. 20, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 158 ft<sup>3</sup>/s at 2100 hrs, July 6, gage height, 2.23 ft; minimum daily discharge, 3.3 ft<sup>3</sup>/s, Oct. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	3.8	3.9	4.2	4.8	6.5	8.3	33	79	110	74	93
2	4.3	3.8	4.0	4.3	4.8	6.5	8.3	40	71	113	101	89
3	4.3	3.8	4.1	4.1	4.8	6.5	8.3	52	66	115	100	88
4	4.3	3.8	4.1	4.0	4.8	6.5	8.8	61	63	116	103	88
5	4.4	4.1	4.2	3.8	4.8	6.5	9.0	60	62	117	107	88
6	4.3	4.6	3.9	3.8	5.1	6.5	9.0	70	58	125	115	88
7	4.8	4.3	4.1	3.8	5.3	6.8	9.0	71	39	152	117	87
8	4.9	4.2	4.2	3.8	5.3	7.0	9.0	69	30	149	117	76
9	4.6	3.7	4.1	3.8	5.4	7.1	9.0	62	27	146	112	70
10	4.6	3.6	4.1	3.8	5.3	7.1	8.7	59	27	142	95	70
11	4.8	3.8	3.9	4.3	5.6	7.0	8.6	49	27	137	82	70
12	4.4	3.8	4.0	4.2	5.9	7.1	9.0	58	27	133	79	70
13	4.2	3.7	3.9	4.3	5.9	7.1	9.0	51	27	130	88	59
14	4.1	3.8	3.9	4.3	5.9	7.1	9.0	50	28	128	94	54
15	3.6	3.4	3.8	4.4	5.9	7.1	8.9	49	32	125	101	53
16	3.3	3.4	4.1	4.4	5.9	7.1	9.0	49	35	122	116	51
17	3.5	3.7	4.1	4.6	5.9	7.2	9.0	52	36	114	120	40
18	3.4	3.8	4.1	4.8	5.9	7.7	9.0	54	37	99	121	31
19	3.4	3.8	3.9	4.7	6.1	7.7	9.0	66	39	94	120	23
20	3.5	3.8	3.8	4.6	6.0	7.7	9.0	70	51	92	119	23
21	3.8	3.8	4.3	4.8	6.0	7.7	9.0	70	84	93	119	23
22	4.1	3.8	4.1	4.8	6.2	7.7	9.0	70	104	92	119	43
23	4.1	3.8	4.0	4.8	6.3	7.7	9.0	71	105	94	118	43
24	4.0	3.8	4.1	4.8	6.5	7.7	9.2	74	106	93	118	50
25	4.5	3.8	4.0	4.8	6.5	7.7	9.4	83	131	92	118	35
26	4.5	3.8	4.3	4.8	6.5	7.8	9.1	83	144	90	118	7.5
27	3.8	3.8	4.4	4.8	6.5	8.8	9.4	86	138	92	107	7.0
28	3.9	3.8	4.6	4.8	6.5	8.3	10	95	128	90	102	6.9
29	3.8	3.8	4.6	4.8	---	8.3	17	90	130	92	101	6.9
30	4.2	3.8	4.8	4.8	---	8.3	30	83	109	92	101	6.9
31	4.2	---	4.4	4.8	---	8.3	---	80	---	91	101	---
TOTAL	127.9	114.7	127.8	136.8	160.4	228.1	298.0	2010	2040	3470	3303	1540.2
MEAN	4.13	3.82	4.12	4.41	5.73	7.36	9.93	64.8	68.0	112	107	51.3
MAX	4.9	4.6	4.8	4.8	6.5	8.8	30	95	144	152	121	93
MIN	3.3	3.4	3.8	3.8	4.8	6.5	8.3	33	27	90	74	6.9
AC-FT	254	228	253	271	318	452	591	3990	4050	6880	6550	3050

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915-36, 1938-93, BY WATER YEAR (WY)

	12.5	10.4	11.3	11.7	11.4	15.5	29.1	98.0	107	82.5	64.8	33.9
MEAN	12.5	10.4	11.3	11.7	11.4	15.5	29.1	98.0	107	82.5	64.8	33.9
MAX	57.8	51.8	97.8	121	55.8	76.7	196	457	926	215	143	104
(WY)	1938	1984	1942	1984	1985	1983	1984	1984	1983	1983	1986	1983
MIN	2.85	3.19	2.67	2.95	3.54	4.69	6.05	27.8	21.0	7.84	7.61	4.59
(WY)	1977	1978	1978	1978	1978	1978	1991	1977	1919	1919	1919	1956

## SUMMARY STATISTICS

## FOR 1992 CALENDAR YEAR

## FOR 1993 WATER YEAR

## WATER YEARS 1915-36, 1938-93

ANNUAL TOTAL	7443.4	13556.9	
ANNUAL MEAN	20.3	37.1	
HIGHEST ANNUAL MEAN			40.5
LOWEST ANNUAL MEAN			163
HIGHEST DAILY MEAN	87	152	1210
LOWEST DAILY MEAN	3.3	3.3	1.3
ANNUAL SEVEN-DAY MINIMUM	3.4	3.5	1.5
ANNUAL RUNOFF (AC-FT)	14760	26890	29350
10 PERCENT EXCEEDS	58	111	102
50 PERCENT EXCEEDS	7.1	8.3	14
90 PERCENT EXCEEDS	3.8	3.8	4.5



## 305

LOCATION.--Lat 37°40'20", long 113°02'02", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec. 13, T. 36 S., R. 11 W., Iron County, Hydrologic Unit 16030006, on right bank, 1.2 mi east of Cedar City, and 3.7 mi downstream (revised) from the mouth of Right Hand Creek.

PERIOD OF RECORD.--May to September 1915 (gage heights and discharge measurements only), October 1915 to July 1916, September 1916 to July 1918, September 1918 to November 1919, May 1935 to September 1937, April 1938 to current year. Records prior to November 1919 exclude flow of power canal; records would be equivalent if flow in canal were added.

GAGE.--Water-stage recorder. Crest-stage gage since Aug. 1, 1989. Concrete control since July 1972, rebuilt July 29, 1988. Elevation of gage is 6,000 ft above sea level, from topographic map. Prior to Mar. 30, 1939, nonrecording gages and Mar. 30, 1939 to May 14, 1945, water-stage recorder at several sites about 0.5 mi upstream at various datums. May 15, 1945 to Oct. 10, 1951, May 4 to July 2, 1952, water-stage recorder at site 2 mi upstream at different datum. July 3, 1952 to Nov. 17, 1967, water-stage recorder at site 600 ft upstream at different datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft<sup>3</sup>/s, July 23, 1969, gage height, 11.67 ft from flood-mark, based on slope-area measurement of July 16, 1967 and applied to site and datum now in use; minimum daily discharge, 2.1 ft<sup>3</sup>/s, Nov. 3, 1990.

Minimum daily, 6.6 ft<sup>3</sup>/s Nov. 24.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	16	e8.0	12	12	11	30	156	377	62	20	15
2	8.1	19	e8.2	10	11	11	40	163	348	58	20	15
3	8.1	15	8.3	e7.0	10	12	44	216	313	54	20	14
4	8.3	10	7.8	e7.0	11	13	49	261	251	50	20	14
5	8.4	10	7.9	e10	14	15	45	162	271	47	20	14
6	8.3	9.7	8.0	11	11	18	40	146	338	43	19	14
7	8.1	12	9.7	10	11	23	34	160	242	40	21	14
8	8.1	13	9.0	9.9	16	29	39	184	291	37	20	13
9	7.8	10	8.9	9.1	13	27	52	142	225	36	23	13
10	7.8	9.4	9.3	9.1	11	27	53	189	196	34	23	13
11	7.8	e8.1	9.5	e7.0	11	22	59	283	191	34	20	13
12	7.7	e9.1	8.8	e9.0	11	18	64	345	204	33	19	13
13	7.6	9.1	10	14	10	18	42	466	213	32	18	13
14	7.5	9.2	9.7	11	10	21	46	482	216	31	18	13
15	7.3	9.2	10	10	10	19	49	504	213	30	17	13
16	7.4	8.7	e8.0	11	11	24	55	534	206	29	17	13
17	7.4	8.0	e8.0	11	10	32	74	572	190	28	16	13
18	7.4	7.9	e8.0	12	10	41	82	587	167	27	16	14
19	7.3	8.3	e8.0	11	14	44	74	538	149	26	16	14
20	7.4	6.8	e8.0	10	12	41	81	579	141	26	22	14
21	7.3	e7.1	e8.0	11	11	43	85	602	137	25	19	13
22	7.5	e7.4	e8.0	11	11	52	90	592	130	25	16	13
23	7.3	7.7	e8.0	9.4	12	62	105	579	117	25	16	13
24	15	6.6	e8.0	9.8	12	57	90	567	107	29	15	13
25	15	e6.8	e8.0	9.4	11	52	108	560	97	26	15	13
26	10	e7.0	e8.0	11	11	60	120	558	89	24	16	13
27	9.7	e7.2	e8.0	12	11	46	127	540	84	23	17	13
28	11	e7.4	11	12	11	31	149	503	79	22	16	13
29	12	e7.6	10	13	---	26	151	442	73	22	16	12
30	25	e7.8	7.0	11	---	25	160	416	67	22	17	12
31	20	---	11	12	---	26	---	404	---	21	16	---
TOTAL	295.8	281.1	268.1	323.7	319	946	2237	12432	5722	1021	564	400
MEAN	9.54	9.37	8.65	10.4	11.4	30.5	74.6	401	191	32.9	18.2	13.3
MAX	25	19	11	14	16	62	160	602	377	62	23	15
MIN	7.3	6.6	7.0	7.0	10	11	30	142	67	21	15	12
AC-FT	587	558	532	642	633	1880	4440	24660	11350	2030	1120	790

MEAN	12.4	11.3	10.1	9.85	11.7	17.5	56.6	147	68.5	21.9	17.4	13.5
MAX	38.4	24.1	21.3	17.7	18.6	36.0	140	489	428	69.9	59.7	37.1
(WY)	1973	1988	1984	1984	1947	1986	1985	1973	1983	1983	1968	1967
MIN	6.17	5.95	5.78	6.41	7.40	9.10	17.1	19.0	11.6	7.61	5.94	6.33
(WY)	1991	1978	1991	1951	1960	1951	1975	1977	1989	1959	1960	1956

ANNUAL TOTAL	8914.8		24809.7						
ANNUAL MEAN	24.4		68.0			33.2			
HIGHEST ANNUAL MEAN						86.0			1983
LOWEST ANNUAL MEAN						11.4			1977
HIGHEST DAILY MEAN	180	Apr 29	602	May 21	1080			May 31	1983
LOWEST DAILY MEAN	6.3	Jan 8	6.6	Nov 24	2.1			Nov 3	1990
ANNUAL SEVEN-DAY MINIMUM	7.1	Nov 20	7.1	Nov 20	2.5			Oct 28	1990
ANNUAL RUNOFF (AC-FT)	17680		49210		24080				
10 PERCENT EXCEEDS	65		205		76				
50 PERCENT EXCEEDS	10		15		13				
90 PERCENT EXCEEDS	7.9		8.0		7.6				

e Estimated

## DISCHARGE MEASUREMENTS AT SOUTHERN PACIFIC TRANSPORTATION CO. CAUSEWAY

## GREAT SALT LAKE BASIN

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Compilation of data through the 300 ft breach openingLat 41°13'20", long 112°50'30"  
1.2 mi east of Lakeside and 1500 ft  
east of west shore

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Date of measurement	Discharge (ft <sup>3</sup> /s)	Specific gravity	Temperature (°C)
June 10, 1993	(a) 271 (b) 0	1.086	18.5

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(a) indicates flow from south to north  
(b) indicates flow from north to south

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements Date	Discharge (ft <sup>3</sup> /s)
VIRGIN RIVER BASIN						
Beaver Dam Wash near end of road, north of Motoqua	Virgin River	Lat 37°24'26" long 114°01'04"		1981-82	8-04-93	2.92
Cain Spring at road crossing	Beaver Dam Wash	Lat 37°21'06" long 113°59'20"			8-04-93	.64
Tunnel Spring No. 3	East Fork	Lat 37°21'07" long 113°57'06"			8-18-93	.76
East Fork at DI Ranch	Beaver Dam Wash	Lat 37°19'52" long 113°57'36"			8-04-93	1.61
East Fork at Motoqua road crossing (North)	Beaver Dam Wash	Lat 37°18'37" long 113°59'49"	55.9	1981-82 1967	4-02-93 4-14-93 5-18-93 6-02-93 8-04-93	25.9 18.8 2.89 2.93 0
Beaver Dam Wash at Motoqua road crossing (West)	Virgin River	Lat 37°18'31" long 113°59'57"	185	1981-82	4-02-93 4-14-93 4-16-93 5-18-93 6-02-93 8-04-93	161 94.7 83.9 26.3 17.8 2.70
Beaver Dam Wash downstream of Bentley Spring area	Virgin River	Lat 37°17'00" long 113°59'33"			8-18-93	2.39
Spring Area at Jackson well	Beaver Dam Wash	Lat 37°13'10" long 113°59'50"			4-16-93 5-18-93 8-18-93	3.98 3.35 1.16
Beaver Dam Wash downstream of Jackson Wash spring area	Virgin River	Lat 37°12'54" long 113°59'49"			4-14-93 5-16-93	79.8 68.1
Beaver Dam Wash at Lytle Ranch near Santa Clara, Utah	Virgin River	Lat 37°09'38" long 114°00'59"	318		3-09-93 3-13-93 4-14-93 4-16-93 4-27-93 5-31-93 8-03-93	289 230 81.7 77.0 53.3 11.9 7.00
Spring flow at Tanner Monument at Lytle Ranch	Beaver Dam Wash	Lat 37°09'20" long 114°00'59"			3-09-93	.94
Beaver Dam Wash at road crossing downstream of Lytle Ranch	Virgin River	Lat 37°08'20" long 114°01'36"			2-08-93	253
Beaver Dam Wash at energy trans crossing	Virgin River	Lat 37°05'21" long 114°01'29"			2-08-93 3-09-93 4-14-93 4-16-93	33.7 248 68.7 59.6
Beaver Dam Wash at BLM Well	Virgin River	Lat 37°01'45" long 114°00'08"			2-08-93 4-14-93 4-16-93	0 23.8 18.9
Beaver Dam Wash at Welcome Creek	Virgin River	Lat 36°58'11" long 113°58'51"			2-08-93 4-14-93 4-16-93 5-15-93	0 23.6 20.2 13.5
Beaver Dam Wash at bridge of Hiway 91 09414900	Virgin River	Lat 36°54'07" long 113°55'58"	575	1967 1957-58	2-08-93 4-14-93 4-16-93 6-01-93 8-02-93	1.53 3.43 3.09 2.03 1.81
Beaver Dam Wash at mouth	Virgin River	Lat 36°53'43" long 113°55'14"	576	1981-82 1967-68 1957-58 1949-55 1946-47	4-14-93 4-16-93 4-28-93 6-01-93 8-02-93	10.0 9.26 9.40 7.74 6.84

308 DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1993--Continued

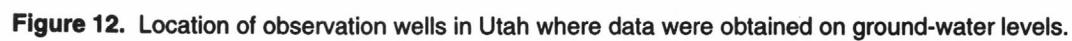
Jackson Spring	Jackson Wash	Lat 37°16'37" long 113°53'28"	5-19-93	0.015
Jackson Wash	Beaver Dam Wash	Lat 37°16'36" long 113°53'25"	5-19-93	.097
Littlefield Springs at I-15 bridge	Virgin River	Lat 36°53'37" long 113°55'03"	2-07-93	2.93

WEBER RIVER BASIN

10132500 Lost Creek	Weber River	Lat 41°10'35" long 111°24'20" Morgan County, 9.5 mi north- east of Croydon.	133	1922* 1942-67* 1988-89	10-01-92 6-15-93	9 11
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\* Operated as a continuous gaging station.



GROUND-WATER LEVELS  
BEAVER COUNTY

382551112555101. LOCAL NUMBER, (C-27-10)25cbd-1.  
LOCATION.--Lat 38°25'51", long 112°55'51", Hydrologic Unit 16030007.  
Owner: Phillips Petroleum.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 400 ft.  
DATUM.--Elevation of land-surface datum is 5,320 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.  
REMARKS.--Records fair.  
PERIOD OF RECORD.--April 1976 to September 1993 (discontinued).  
REVISED RECORDS.--WDR UT-92-1: 1984-90.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 323.75 ft below land-surface datum, May 15, 1976; lowest, 327.14 ft (revised) below land-surface datum, Oct. 4, 1985.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	325.87	325.62	325.70	325.78	325.76	325.81	325.64	325.71	325.66	325.61	325.49	325.47
10	325.86	325.81	325.76	325.84	325.72	325.65	325.67	325.57	325.69	325.53	325.47	325.53
15	325.80	325.67	325.66	325.86	325.62	325.64	325.71	325.63	325.65	325.43	325.49	325.51
20	325.60	325.64	325.85	325.88	325.60	325.73	325.72	325.58	325.73	325.40	325.54	325.50
25	325.56	325.97	325.78	325.79	325.80	325.75	325.69	325.66	325.74	325.47	325.56	325.55
EOB	325.76	325.78	325.80	325.74	325.69	325.69	325.52	325.62	325.66	325.53	325.56	325.51

382020112585901. LOCAL NUMBER, (C-28-10)28cdd-1.  
LOCATION.--Lat 38°20'20", Long 112°58'59", Hydrologic Unit 16030007.  
Owner: Wiseman.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 16 in., depth 360 ft, cased to 60 ft.  
DATUM.--Elevation of land-surface datum is 5,019 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.  
REMARKS.--Records fair.  
PERIOD OF RECORD.--April 1952 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.99 ft below land-surface datum, Sep. 30, Oct. 1, 1984; lowest, 68.97 ft below land-surface datum, June 2, 1993.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.53	47.81	47.17	46.94	46.83	46.71	46.36	58.74	67.90	67.19	61.45	63.43
10	49.08	47.67	47.12	46.87	46.76	46.64	46.36	60.50	61.16	65.82	62.90	60.10
15	48.71	47.56	47.06	46.91	46.74	46.60	48.48	64.07	59.59	67.08	64.22	55.91
20	48.53	47.42	47.05	46.88	46.68	46.57	50.17	66.56	60.87	67.22	65.21	51.58
25	48.26	47.37	47.05	46.90	46.70	46.51	53.44	65.49	62.17	65.46	65.69	50.43
EOB	47.92	47.29	46.97	46.83	46.70	46.45	54.38	68.31	66.39	61.60	65.32	49.32

BOX ELDER COUNTY

414236112101201. LOCAL NUMBER, (B-11-3)10abb-4.  
LOCATION.--Lat 41°42'36", long 112°10'12", Hydrologic Unit 16010204.  
Owner: Rocky Mountain Packing Company.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 705 ft, cased to 437 ft.  
DATUM.--Elevation of land-surface datum is 4,318 ft above sea level. Measuring point: Top of casing, 0.50 ft above land-surface datum.  
REMARKS.--Records good.  
PERIOD OF RECORD.--October 1979 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.00 ft below land-surface datum, July 27, Sep. 12, 1984; lowest, 25.77 ft below land-surface datum, May 19, 20, 1993.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.73	24.72	24.82	24.97	25.28	25.46	25.59	25.67	25.60	25.26	24.93	24.52
10	24.76	24.69	24.80	24.91	25.21	25.50	25.62	25.69	25.55	25.22	24.85	24.49
15	24.73	24.81	24.85	24.97	25.23	25.49	25.63	25.72	25.51	25.15	24.73	24.38
20	24.75	24.75	24.87	25.00	25.20	25.51	25.65	25.75	25.48	25.12	24.72	24.30
25	24.78	24.75	25.02	25.14	25.23	25.55	25.66	25.74	25.44	25.02	24.64	24.27
EOB	24.66	24.88	24.92	25.21	25.34	25.56	25.74	25.73	25.34	24.96	24.61	24.25

414411112543701. LOCAL NUMBER, (B-12-9)30cda-1.  
LOCATION.--Lat 41°44'11", long 112°54'37", Hydrologic Unit 16020309.  
Owners: U.S. Geological Survey.  
AQUIFER.--Basalt.  
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 162 ft, cased to 131 ft.  
DATUM.--Elevation of land-surface datum is 4,239 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.  
REMARKS.--Records good except for estimated days, which are fair.  
PERIOD OF RECORD.--August 1972 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.08 ft below land-surface datum, May 25, 31, July 25, 1987; lowest, 25.86 ft below land-surface datum, Nov. 11, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.75	25.81	25.76	25.73	e25.65	25.53	e25.45	25.40	25.34	25.44	25.57	25.69
10	25.75	25.83	25.75	25.68	e25.62	25.47	e25.44	25.39	25.36	25.46	25.59	25.71
15	25.77	25.83	25.74	25.69	e25.60	e25.47	25.44	25.36	25.36	25.50	25.63	25.72
20	25.77	25.80	25.74	25.67	e25.57	e25.46	25.45	25.35	25.40	25.51	25.65	25.74
25	25.78	25.83	25.74	25.68	e25.55	e25.46	25.44	25.36	25.43	25.53	25.67	25.78
EOB	25.80	25.79	25.74	25.65	e25.53	e25.45	25.42	25.36	25.44	25.58	25.66	25.77

GROUND-WATER LEVELS  
BOX ELDER COUNTY--Continued

311

415703112514501. LOCAL NUMBER, (B-14-9)9add-1.  
LOCATION.--Lat 41°57'03", long 112°51'45", Hydrologic Unit 16020309.  
Owner: Cyprus Farms Inc.

AQUIFER.--Basalt.  
WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 20 in., depth 400 ft., cased to 395 ft.  
DATUM.--Elevation of land-surface datum is 4,384 ft above sea level. Measuring point: Top of casing, at land-surface datum.  
REMARKS.--Records good except for estimated days, which are fair.  
PERIOD OF RECORD.--July 1981 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 160.12 ft below land-surface datum, Apr. 16, 1988; lowest, 180.25 ft below land-surface datum, Sept. 16, 1993.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	178.79	171.36	168.95	167.84	167.16	166.26	165.89	166.31	175.02	177.21	180.06	178.29
10	178.25	e170.83	168.38	167.47	166.84	166.32	165.89	167.11	176.39	177.16	179.97	179.62
15	175.56	e170.35	168.43	167.22	166.31	166.21	165.81	169.45	176.74	177.97	179.65	180.11
20	173.86	169.87	168.34	167.44	166.45	166.24	165.88	171.58	177.29	178.67	179.26	177.93
25	172.86	169.81	168.23	167.13	166.23	166.06	165.78	173.41	177.77	179.33	178.33	176.45
EOM	171.96	169.36	168.03	167.19	166.65	166.09	165.67	174.95	177.96	179.90	178.35	175.54

IRON COUNTY

375241112471001. LOCAL NUMBER, (C-34-8)5bca-1.  
LOCATION.--Lat 37°52'41", long 112°47'10", Hydrologic Unit 16030006.  
Owner: Paragonah Canal Company.

AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 420 ft.  
DATUM.--Elevation of land-surface datum is 5,802 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.  
REMARKS.--Records good.  
PERIOD OF RECORD.--September 1935 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.45 ft below land-surface datum, June 26, 1949; lowest, 53.37 ft below land-surface datum, Mar. 15, 19, 1993.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.99	52.44	52.65	52.89	53.13	53.27	53.00	51.72	50.84	48.20	49.59	50.24
10	52.08	52.21	52.62	52.87	53.18	53.25	52.81	51.62	50.75	47.76	49.76	50.43
15	52.19	52.19	52.64	52.91	53.15	53.32	52.60	51.51	50.22	49.13	49.84	50.57
20	52.26	52.21	52.85	53.01	53.12	53.31	52.35	51.31	50.16	49.36	49.98	50.64
25	52.37	52.51	52.87	53.02	53.22	53.30	52.05	51.14	49.60	49.47	50.15	50.57
EOM	52.44	52.60	52.84	53.06	53.23	53.21	51.81	50.91	49.54	49.45	50.32	50.73

374252113391801. LOCAL NUMBER, (C-35-16)33bcc-1.  
LOCATION.--Lat 37°42'52", long 113°39'18", Hydrologic Unit 16030006.  
Owner: Charles F. Twitchell

AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 16 in., depth 160 ft.  
DATUM.--Elevation of land-surface datum is 5,175.11 ft above sea level. Measuring point: Top of casing, 0.55 ft above land-surface datum.  
REMARKS.--There are several nearby pumped wells. Records good except for estimated days, which are poor.  
PERIOD OF RECORD.--September 1947 to 1953, 1955 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.06 ft below land-surface datum, Sept. 11, 1947; lowest, 117.79 ft below land-surface datum, Aug. 26, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	116.14	114.36	112.97	111.92	e111.10	110.28	109.22	107.67	110.03	112.43	115.08	117.63
10	115.85	114.22	112.75	111.63	e110.90	109.94	109.00	107.73	110.02	113.04	115.60	117.42
15	115.65	113.83	112.53	111.69	e110.70	109.93	108.68	108.29	109.91	113.69	116.14	116.91
20	115.22	113.61	112.47	111.55	e111.50	109.74	108.28	108.58	110.10	114.06	116.68	116.53
25	114.96	113.59	112.27	e111.40	110.51	109.59	107.82	108.93	110.82	114.25	117.03	116.10
EOM	114.75	113.24	112.06	e111.20	110.33	109.50	107.47	109.59	111.51	114.58	117.49	115.72

373735113393801. LOCAL NUMBER, (C-36-16)29daa-1.  
LOCATION.--Lat 37°37'35", long 113°39'38", Hydrologic Unit 16030006.  
Owner: George Gardner.

AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 14 in., depth 380 ft.  
DATUM.--Elevation of land-surface datum is 5,233.36 ft above sea level. Measuring point: Top of casing, 1.50 ft above land-surface datum.  
REMARKS.--There are several nearby pumped wells. Records good except for estimated days, which are poor.  
PERIOD OF RECORD.--October 1989 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 167.63 ft below land-surface datum, Apr. 12, 1990; lowest, 190.21 ft below land-surface datum, Aug. 19, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	183.41	181.57	e180.70	179.34	178.36	177.68	176.30	177.70	181.93	182.81	185.09	e186.00
10	183.17	181.39	180.19	178.98	178.12	177.21	176.23	178.13	179.17	183.89	185.37	e185.00
15	182.60	181.13	179.92	179.09	177.01	177.10	176.09	181.79	181.54	e184.00	185.51	183.72
20	182.31	180.87	180.00	179.05	177.03	177.03	175.94	178.56	180.38	185.40	186.72	183.65
25	182.05	181.01	179.70	178.79	177.67	176.77	176.35	179.87	183.93	183.44	187.02	182.85
EOM	181.82	e181.00	179.54	178.47	177.64	176.74	176.60	179.81	185.12	184.50	186.97	182.50



## GROUND-WATER LEVELS

## JUAB COUNTY

395259113430401. LOCAL NUMBER, (C-11-17)12cbb-1.

LOCATION.--Lat 39°52'59", long 113°43'04", Hydrologic Unit 16020306.

Owner: Dorcy Sabey.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled irrigation artesian well, diameter 16 in, depth unknown.

DATUM.--Elevation of land-surface datum is 4,390.00 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.82 ft below land-surface datum, June 26, 1987; lowest, 55.11 ft below land-surface datum, Aug. 6, 1990.

## DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

## DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.80	53.21	52.84	52.79	52.74	52.69	51.99	51.38	50.09	49.34	50.38	51.68
10	53.69	53.11	52.84	52.76	52.72	52.65	51.80	51.23	49.95	49.51	50.49	51.93
15	53.74	53.01	52.83	52.76	52.70	52.64	51.71	51.37	49.86	49.79	50.83	52.06
20	53.54	52.95	52.83	52.77	52.67	52.62	51.65	51.06	49.88	49.97	51.08	52.19
25	53.48	52.91	52.82	52.77	52.70	52.50	51.56	50.86	49.67	50.17	51.38	52.01
EOM	53.34	52.87	52.80	52.74	52.69	52.23	51.50	50.30	49.53	50.36	51.58	51.96

393143111523301. LOCAL NUMBER, (C-15-1)12aba-1.

LOCATION.--Lat 39°31'43", long 111°52'33", Hydrologic Unit 16030005.

Owner: R. C. Mangelson.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled stock artesian well, diameter 6 in., depth 117 ft, cased to 117 ft.

DATUM.--Elevation of land-surface datum is 5,196.90 ft above sea level. Measuring point: Top of casing, 1.50 ft above land-surface datum.

REMARKS.--Records good except for estimated days, which are fair.

PERIOD OF RECORD.--August 1935 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.41 ft below land-surface datum, May 21, 1985; lowest recorded, 71.51 ft below land-surface datum, Aug. 27, 1993.

## DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

## DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	70.54	70.20	70.04	69.93	e69.85	69.79	69.63	69.46	69.95	70.26	71.17	e71.00
10	70.42	70.17	70.03	69.87	e69.80	69.75	69.63	69.42	70.09	70.45	71.25	e70.80
15	70.33	70.15	70.01	69.90	e69.80	69.72	69.60	69.31	70.12	70.62	71.26	e70.50
20	70.28	70.11	70.00	69.90	69.75	69.71	69.58	69.58	70.16	70.72	71.37	e70.30
25	70.24	70.12	70.00	e69.90	69.75	69.69	69.55	69.75	70.19	70.89	71.44	e70.10
EOM	70.22	70.10	69.96	e69.85	69.75	69.68	69.52	69.85	70.25	71.09	e71.20	69.85

## KANE COUNTY

37090112335001. LOCAL NUMBER, (C-42-6)18cca-1 (previously reported 19baa-1).

LOCATION.--Lat 37°09'15", long 112°34'13", Hydrologic Unit 15010003.

Owner: Kanab City.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 560 ft.

DATUM.--Elevation of land-surface datum is 5,660.00 ft above sea level. Measuring point: Top of casing, 1.6 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--February 1977 to April 1993 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 160.51 ft below land-surface datum, Jan. 18, 1988; lowest, 167.40 ft below land-surface datum, Apr. 8, 1980.

## DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

## DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	164.32	164.29	164.09	164.38	164.59	164.78	---	---	---	---	---	---
10	164.38	164.21	164.45	164.06	164.24	164.44	---	---	---	---	---	---
15	164.25	164.45	164.15	164.50	164.15	164.38	---	---	---	---	---	---
20	164.28	164.02	164.53	164.67	163.98	164.50	---	---	---	---	---	---
25	164.35	164.37	164.59	164.71	164.29	164.37	---	---	---	---	---	---
EOM	164.05	164.60	164.46	164.46	164.41	e164.30	---	---	---	---	---	---

370523112334702. LOCAL NUMBER, (C-42-6)30dcc-2.

LOCATION.--Lat 37°05'23", long 112°33'47", Hydrologic Unit 15010003.

Owner: Kanab City.

AQUIFER.--Consolidated Navajo Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 230 ft.

DATUM.--Elevation of land-surface datum is 5,280.00 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good.

PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 53.30 ft below land-surface datum, Apr. 25, 1986; lowest, 65.75 ft below land-surface datum, Dec. 13, 1992.

## DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

## DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	62.91	64.88	65.55	64.03	63.32	62.61	64.64	65.43	63.53	62.67	62.02	61.49
10	63.67	65.02	65.66	63.79	63.17	62.73	64.90	64.86	63.37	62.55	61.94	61.44
15	64.12	65.13	65.38	63.64	62.99	63.35	65.06	64.50	63.20	62.43	61.83	61.37
20	64.45	65.21	64.94	63.46	62.84	63.78	65.31	64.22	63.04	62.31	61.76	61.29
25	64.70	65.39	64.61	63.33	62.77	64.09	65.07	63.99	62.93	62.23	61.68	61.25
EOM	64.55	65.48	64.27	63.55	62.67	64.44	65.10	63.73	62.78	62.12	61.58	61.18

## GROUND-WATER LEVELS

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## MILLARD COUNTY

393046112231301. LOCAL NUMBER, (C-15-5)15dad-1.  
 LOCATION.--Lat 39°30'46", long 112°23'13", Hydrologic Unit 16030005.  
 Owner: Anaconda Copper Co.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 1,190 ft, cased to 1,115 ft, perforated 860-1,050 ft.  
 DATUM.--Elevation of land-surface datum is 4,780 ft above sea level. Measuring point: Top of 12-in. casing, 2.00 ft above land-surface datum.  
 REMARKS.--Records good.  
 PERIOD OF RECORD.--January 1975 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.03 ft below land-surface datum, Apr. 2, 1986; lowest, 174.62 ft below land-surface datum, Aug. 24, 1978.

 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
 DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	141.14	130.65	124.33	120.25	117.86	116.57	131.71	141.43	142.33	136.53	134.59	139.27
10	142.24	129.29	123.56	119.63	117.48	121.48	132.86	143.10	142.02	135.29	134.16	140.42
15	142.53	127.84	122.73	119.44	116.98	124.85	133.72	143.56	141.91	135.18	133.84	146.00
20	138.25	126.73	122.30	119.00	116.63	125.92	134.71	146.24	142.04	134.93	133.84	144.47
25	135.21	126.03	121.69	118.74	116.54	128.52	137.77	147.96	139.47	134.67	134.29	148.50
EOM	132.42	125.25	120.83	118.16	116.34	130.42	140.43	144.12	137.88	134.70	137.81	146.42

393020112362201. LOCAL NUMBER, (C-15-7)23bac-1.  
 LOCATION.--Lat 39°30'20", long 112°36'22", Hydrologic Unit 16030007.  
 Owner: U.S. Geological Survey.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 182 ft.  
 DATUM.--Elevation of land-surface datum is 4,629 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.  
 REMARKS.--Records good.  
 PERIOD OF RECORD.--August 1978 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.57 ft below land-surface datum, Mar. 3, 1989; lowest, 15.91 ft below land-surface datum, Oct. 16, 1980.

 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
 DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.05	11.93	11.61	11.22	10.81	10.29	9.82	9.88	10.37	11.02	11.55	11.83
10	12.06	11.88	11.56	11.02	10.67	10.13	9.84	10.01	10.50	11.12	11.60	11.90
15	12.02	11.83	11.48	11.02	10.58	10.06	9.85	10.06	10.57	11.22	11.59	11.94
20	12.02	11.74	11.47	10.98	10.44	10.01	9.91	10.08	10.70	11.34	11.67	11.93
25	12.02	11.77	11.43	10.98	10.33	9.93	9.89	10.19	10.83	11.39	11.69	11.98
EOM	11.94	11.72	11.31	10.86	10.31	9.89	9.89	10.32	10.91	11.51	11.80	11.99

385844112245801. LOCAL NUMBER, (C-21-5)21aba-1.  
 LOCATION.--Lat 38°58'44", long 112°24'58", Hydrologic Unit 16030005.  
 Owner: Delyle Carling.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 246 ft, cased to 220 ft.  
 DATUM.--Elevation of land-surface datum is 4,744.44 ft above sea level. Measuring point: Top of casing, 0.50 ft above land-surface datum.  
 REMARKS.--Records fair except for estimated days, which are poor.  
 PERIOD OF RECORD.--May 1929 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.96 ft above land-surface datum, Feb. 24, 1949; lowest, 83.02 ft below land-surface datum, July 20, 1965.

 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
 DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	e48.20	e46.70	45.59	44.72	e43.80	43.12	42.95	48.31	49.59	51.23	51.66	51.77
10	e47.90	e46.40	45.45	44.51	43.69	42.94	43.20	48.28	49.09	50.85	51.81	51.92
15	e47.70	e46.20	45.30	44.43	43.50	42.81	43.81	49.07	50.28	51.34	51.63	50.84
20	e47.40	46.06	45.15	44.30	43.34	42.69	45.35	49.52	51.06	51.88	51.65	50.34
25	e47.20	45.97	45.02	44.20	43.27	42.53	46.97	49.74	51.19	51.87	51.75	50.28
EOM	e46.90	45.75	44.84	e44.00	43.20	42.42	47.86	49.56	51.54	51.99	51.67	50.06

384906112330601. LOCAL NUMBER, (C-23-6)17baa-1.  
 LOCATION.--Lat 38°49'06", long 112°33'06", Hydrologic Unit 16030005.  
 Owner: Boyd Watts.  
 AQUIFER.--  
 WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 18 in., depth 262 ft, cased to 140 ft.  
 DATUM.--Elevation of land-surface datum is 4,711.00 ft above sea level. Measuring point: Top of casing, 2.0 ft above land-surface datum.  
 REMARKS.--Records fair except for estimated days, which are poor.  
 PERIOD OF RECORD.--June 1958 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.20 ft below land-surface datum, Mar. 3, 1989; lowest, 54.03 ft below land-surface datum, Sept. 6, 1979.

 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
 DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.66	34.59	34.19	34.05	33.96	33.90	33.64	35.56	41.54	42.27	40.68	42.21
10	35.35	34.56	34.18	33.91	33.88	33.71	33.82	35.64	42.18	41.06	39.52	42.74
15	35.13	e34.50	34.12	34.05	33.77	33.72	33.91	35.90	41.73	42.72	39.56	41.57
20	34.92	34.34	34.18	34.03	33.66	33.69	34.50	35.96	41.72	41.31	39.66	39.94
25	34.81	34.45	34.15	34.05	33.82	33.65	34.89	36.15	40.82	41.15	39.30	38.13
EOM	34.67	34.34	34.10	33.95	33.82	33.68	35.10	39.49	41.94	41.46	41.51	37.82

GROUND-WATER LEVELS  
SALT LAKE COUNTY

403916111575901. LOCAL NUMBER, (C-2-1)9ccc-1.  
LOCATION.--Lat 40°39'16", long 111°57'59", Hydrologic Unit 16020204.  
Owner: Salt Lake County Conservancy District.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled artesian unused public supply well, diameter 16 in, depth 795 ft, perforated 187 - 372 ft.  
DATUM.--Elevation of land-surface datum is 4,461 ft above sea level. Measuring point: Top of casing, 2.10 ft above land-surface datum.  
REMARKS.--Records good.  
PERIOD OF RECORD.--April 1966 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.75 ft below land-surface datum, Oct. 25, 1971; lowest, 86.80 ft below land-surface datum, July 25, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.78	57.89	58.14	58.40	58.76	59.11	59.27	59.59	59.60	59.51	59.17	58.75
10	57.82	57.95	58.20	58.29	58.72	59.10	59.38	59.60	59.63	59.47	59.09	58.73
15	57.81	58.02	58.22	58.41	58.77	59.10	59.43	59.63	59.62	59.41	58.98	58.63
20	57.85	57.99	58.33	58.48	58.77	59.18	59.56	59.61	59.61	59.35	58.96	58.51
25	57.91	58.12	58.41	58.62	58.85	59.23	59.61	59.62	59.62	59.26	58.90	58.53
EOM	57.86	58.19	58.43	58.67	58.96	59.31	59.67	59.65	59.57	59.24	58.83	58.46

403452111484301. LOCAL NUMBER, (D-3-1)2ccc-1.  
LOCATION.--Lat 40°34'52", long 111°48'43", Hydrologic Unit 16020204.  
Owner: Metropolitan Water District.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 in., depth 1,007 ft, perforated 525-990 ft.  
DATUM.--Elevation of land-surface datum is 5,000 ft above sea level. Measuring point: Top of flange, at land-surface datum.  
REMARKS.--Records fair except for estimated days, which are poor.  
PERIOD OF RECORD.--March 1956 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 515.66 ft below land-surface datum, Nov. 25, 1958; lowest, 596.0 ft below land-surface datum, Oct. 25-31, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	595.42	e595.40	e591.20	e586.80	e582.60	579.34	577.33	577.05	578.38	581.62	585.09	587.32
10	595.56	e594.60	e590.40	e586.20	e581.80	578.69	577.33	576.80	578.21	582.61	585.24	587.71
15	595.63	e593.90	e589.80	e585.40	e581.20	578.35	577.23	576.57	578.64	583.58	585.21	587.92
20	595.83	e593.20	e589.00	e584.80	e580.40	578.02	577.29	576.63	579.06	584.45	585.86	587.83
25	e596.00	e592.50	e588.40	e584.00	e579.80	577.68	577.18	577.26	579.72	584.52	585.87	587.59
EOM	e596.00	e591.80	e587.60	e583.20	579.31	577.72	577.10	578.22	580.62	584.51	586.88	587.21

SAN JUAN COUNTY

375243109191301. LOCAL NUMBER, (D-33-24)30dab-1.  
LOCATION.--Lat 37°52'43", long 109°19'13", Hydrologic Unit 14080203.  
Owner: A. E. C.  
AQUIFER.--Sandstone.  
WELL CHARACTERISTICS.--Drilled unused well, diameter 10 in., depth 319 ft.  
DATUM.--Elevation of land-surface datum is 6,916 ft above sea level. Measuring Point: Top of casing, .60 ft above land-surface datum.  
REMARKS.--Records good except for estimated days, which are poor.  
PERIOD OF RECORD.--July 1955 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 160.52 ft below land-surface datum, Feb. 14, 1990; lowest, 202.89 ft below land-surface datum, July 25, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	161.75	161.80	161.78	161.81	162.02	e161.61	161.29	161.32	161.07	161.00	161.26	161.04
10	161.76	161.76	162.04	161.55	161.74	e161.69	161.48	161.06	161.26	161.12	161.27	161.11
15	161.68	162.10	161.62	161.80	161.53	e161.76	161.41	e161.12	161.20	161.08	161.09	161.09
20	161.81	161.58	161.94	161.85	e161.41	161.83	161.00	e161.12	161.20	161.09	161.17	161.01
25	161.93	161.86	162.04	162.04	e161.48	161.70	161.39	e161.13	161.26	161.14	161.06	161.05
EOM	161.62	162.08	161.95	161.90	e161.53	161.57	161.24	e161.13	161.07	161.27	161.08	161.06

373830109283201. LOCAL NUMBER, (D-36-22)22daa-1.  
LOCATION.--Lat 37°38'30", long 109°28'32", Hydrologic Unit 14080201.  
Owner: Joseph L. Nielson.  
AQUIFER.--  
WELL CHARACTERISTICS.--Drilled stock artesian well, diameter 7 in., depth 140 ft.  
DATUM.--Elevation of land-surface datum is 6,200 ft above sea level. Measuring point: Top of 7 in. casing, 1.00 ft above land-surface datum.  
REMARKS.--Records good.  
PERIOD OF RECORD.--October 1960 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.51 ft below land-surface datum, Sept. 20, 1988; lowest, 57.23 ft below land-surface datum, Oct. 20, 1960.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	47.34	47.38	47.57	48.07	48.70	48.84	47.47	46.75	44.97	43.36	42.76	42.58
10	47.38	47.38	47.94	47.80	48.35	48.52	47.61	46.99	44.90	43.32	42.82	42.70
15	47.28	47.72	47.50	48.18	48.18	48.37	47.43	46.51	44.45	43.11	42.58	42.65
20	47.42	47.10	48.03	48.29	48.13	48.42	47.53	46.11	44.20	42.95	42.72	42.64
25	47.46	47.59	48.11	48.62	48.31	48.17	47.38	45.97	44.06	42.89	42.56	42.73
EOM	47.14	47.94	48.17	48.47	48.42	48.06	47.00	45.41	43.64	42.91	42.66	42.76

## TOOELE COUNTY

405028113362001. LOCAL NUMBER, (B- 1-15) 7cab- 1.  
 LOCATION.--Lat 40°50'28", long 113°36'20", Hydrologic Unit 16020308.  
 Owner: U.S. Geological Survey.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in, depth 6 ft.  
 DATUM.--Elevation of land-surface datum is 4216.14 ft above sea level. Measuring point: Top of casing, 0.75 ft above land-surface datum.  
 REMARKS.--Cluster 2, well 1.  
 PERIOD OF RECORD.--June 1987 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.35 below land-surface datum, Jan 07, 1988, Feb 02, 1988; lowest, 2.70 below land-surface datum, Sep 29, 1988.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1992	2.21	JUN 16, 1993	2.57
MAR 31, 1993	1.52	SEP 15, 1993	2.32

405028113362102. LOCAL NUMBER, (B- 1-15) 7cab- 2.  
 LOCATION.--Lat 40°50'28", long 113°36'21", Hydrologic Unit 16020308.  
 Owner: U.S. Geological Survey.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 15 ft.  
 DATUM.--Elevation of land-surface datum is 4,216.20 ft above sea level. Measuring point: Top of casing, 0.85 ft above land-surface datum.  
 REMARKS.--Cluster 2, well 2.  
 PERIOD OF RECORD.--June 1987 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.02 ft below land-surface datum, Sept 07, 1989; lowest, 2.94 ft below land-surface datum, Nov 04, 1987.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1992	2.23	JUN 16, 1993	2.17
MAR 31, 1993	1.20	SEP 15, 1993	1.16

405028113362101. LOCAL NUMBER, (B- 1-15) 7cab- 3.  
 LOCATION.--Lat 40°50'28", long 113°36'21", Hydrologic Unit 16020308.  
 Owner: U.S. Geological Survey.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in, depth 30 ft.  
 DATUM.--Elevation of land-surface datum is 4,216.26 ft above sea level. Measuring point: Top of casing, 0.90 ft above land-surface datum.  
 REMARKS.--Cluster 2, well 3.  
 PERIOD OF RECORD.--June 1987 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.69 ft below land-surface datum, Oct 03, 1989; lowest, 7.41 ft below land-surface datum June 03, 1987.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1992	1.92	JUN 16, 1993	2.71
MAR 31, 1993	1.50	SEP 15, 1993	1.72

405028113361901. LOCAL NUMBER, (B- 1-15) 7cab-4.  
 LOCATION.--Lat 40°50'28", long 113°36'19", Hydrologic Unit 16020308.  
 Owner: Utah State University.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled water table observation well, diameter 0.75 in, depth 5 ft.  
 DATUM.--Elevation of land-surface datum is 4216.29 ft above sea level. Measuring point: Top of casing, 0.70 ft above land-surface datum.  
 REMARKS.--U.S.U. cluster 2, well 1.  
 PERIOD OF RECORD.--July 1987 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.02 ft below land-surface datum, Sep 07, 1989; lowest, 3.31 ft below land-surface datum, Nov 04, 1987.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1992	2.20	JUN 16, 1993	1.71
MAR 31, 1993	1.21	SEP 15, 1993	1.28

405028113361902. LOCAL NUMBER, (B- 1-15) 7cab- 5.  
 LOCATION.--Lat 40°50'28", long 113°36'19", Hydrologic Unit 16020308.  
 Owner: Utah State University.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 19 ft.  
 DATUM.--Elevation of land-surface datum is 4216.30 ft above sea level. Measuring point: Top of casing, 0.70 ft above land-surface datum.  
 REMARKS.--U.S.U. cluster 2, well 2.  
 PERIOD OF RECORD.--July 1987 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.11 ft below land-surface datum, Sep 07, 1989; lowest, 2.33 ft below land-surface datum, Nov 04, 1987.

## WATER LEVELS IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1992	1.41	JUN 16, 1993	1.78
MAR 31, 1993	1.20	SEP 15, 1993	0.72

GROUND-WATER LEVELS  
TOOELE COUNTY--Continued

405028113361903. LOCAL NUMBER, (B- 1-15) 7cab- 6.  
LOCATION.--Lat 40°50'28", long 113°36'19", Hydrologic Unit 16020308.  
Owner: Utah State University.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 36 ft.  
DATUM.--Elevation of land-surface datum is 4216.22 ft above sea level. Measuring point: Top of casing, 0.80 ft above land-surface datum.  
REMARKS.--U.S.U. cluster 2, well 3.  
PERIOD OF RECORD.--July 1987 current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.06 ft below land-surface datum, Nov. 16, 1990; lowest, 2.81 ft below land-surface datum, July 28, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 15, 1992	0.27	JUN 16, 1993	0.93
MAR 31, 1993	0.58	SEP 15, 1993	0.51

405028113362501. LOCAL NUMBER, (B- 1-15) 7cba- 1.  
LOCATION.--Lat 40°50'28", long 113°36'25", Hydrologic Unit 16020308.  
Owner: U.S. Geological Survey.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 6 ft.  
DATUM.--Elevation of land-surface datum is 4216.14 ft above sea level. Measuring point: Top of casing, 0.60 ft above land-surface datum.  
REMARKS.--Cluster 3, well 1.  
PERIOD OF RECORD.--June 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.88 ft below land-surface datum, Sept. 16, 1991; lowest, 3.70 ft below land-surface datum, June 03, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 1, 1993	1.30	SEP 15, 1993	2.99

405028113362401. LOCAL NUMBER, (B- 1-15) 7cba- 2.  
LOCATION.--Lat 40°50'28", long 113°36'24", Hydrologic Unit 16020308.  
Owner: U.S. Geological Survey.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 15 ft.  
DATUM.--Elevation of land-surface datum is 4216.24 ft above sea level. Measuring point: Top of casing, 0.85 ft above land-surface datum.  
REMARKS.--Cluster 3, well 2.  
PERIOD OF RECORD.--June 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.80 ft below land-surface datum, Sept. 16, 1991; lowest, 5.20 ft below land-surface datum, Feb 13, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1992	3.51	JUN 18, 1993	3.33
APR 1, 1993	1.50	SEP 15, 1993	1.88

405028113362502. LOCAL NUMBER, (B- 1-15) 7cba-3.  
LOCATION.--Lat 40°50'28", long 113°36'25", Hydrologic Unit 16020308.  
Owner: U.S. Geological Survey.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 30 ft.  
DATUM.--Elevation of land-surface datum is 4216.22 ft above sea level. Measuring point: Top of casing, 0.40 ft above land-surface datum.  
REMARKS.--Cluster 3, well 3.  
PERIOD OF RECORD.--June 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.49 ft below land-surface datum, Apr. 01, 1993; lowest, 4.72 ft below land-surface datum, Mar 01, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1992	2.06	JUN 16, 1993	2.59
APR 1, 1993	.49	SEP 15, 1993	1.62

404408113283201. LOCAL NUMBER, (C- 1-14) 18bad-1.  
LOCATION.--Lat 40°44'08", long 113°28'32", Hydrologic Unit 16020308.  
Owner: Utah State University.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 8.5 ft.  
DATUM.--Elevation of land-surface datum is 4,217.58 ft above sea level. Measuring point: Top of casing, 1.20 ft above land-surface datum.  
REMARKS.--U.S.U. cluster 3, well 1.  
PERIOD OF RECORD.--Nov 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.41 ft above land-surface datum, Apr. 01, 1993; lowest, 1.83 ft below land-surface datum, Nov 01, 1988.

WATER LEVELS IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1992	-0.83	JUN 15, 1993	-0.66
APR 01, 1993	0.41	SEP 16, 1993	-1.42



GROUND-WATER LEVELS  
TOOELE COUNTY--Continued

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404408113283101. LOCAL NUMBER, (C- 1-14)18bad-2.  
LOCATION.--Lat 40°44'08", long 113°28'31", Hydrologic Unit 16020308.  
Owner: Utah State University.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 6.5 ft.  
DATUM.--Elevation of land-surface datum is 4,217.52 ft above sea level. Measuring point: Top of casing, 1.60 ft above land-surface datum.  
REMARKS.--U.S.U. cluster 3, well 2.  
PERIOD OF RECORD.--Nov 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.54 ft above land-surface datum, Apr. 01, 1993; lowest, 1.58 ft below land-surface datum, Nov 01, 1988.

WATER LEVELS IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM, OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1992	-0.74	JUN 15, 1993	-0.54
APR 1, 1993	0.54	SEP 16, 1993	-1.41

404407113283101. LOCAL NUMBER, (C- 1-14)18bad- 3.  
LOCATION.--Lat 40°44'07", long 113°28'31", Hydrologic Unit 16020308.  
Owner: Utah State University.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 23 ft.  
DATUM.--Elevation of land-surface datum is 4,217.52 ft above sea level. Measuring point: Top of casing, 1.20 ft above land-surface datum.  
REMARKS.--U.S.U. cluster 3, well 3.  
PERIOD OF RECORD.--Nov 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.23 ft below land-surface datum, Sep 07, 1989; lowest, 4.50 ft below land-surface datum, Jun 06, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1992	0.58	JUN 18, 1993	0.82
APR 1, 1993	0.36	SEP 16, 1993	0.85

404522113344901. LOCAL NUMBER, (C- 1-15) 7add- 1  
LOCATION.--Lat 40°45'22", long 113°34'49", Hydrologic Unit 16020308.  
Owner: U.S. Geological Survey.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in, depth 3 ft.  
DATUM.--Elevation of land-surface datum is 4217.56 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.  
REMARKS.--Cluster 1, well 1.  
PERIOD OF RECORD.--June 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.39 ft below land-surface datum, Feb 02, 1988; lowest, 2.44 ft below land-surface datum, Aug 28, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1992	1.94	JUN 15, 1993	1.31
APR 1, 1993	1.32	SEP 16, 1993	2.06

404523113344801. LOCAL NUMBER, (C- 1-15) 7add-2.  
LOCATION.--Lat 40°45'23", Long 113°34'48", Hydrologic Unit 16020308.  
Owner: U.S. Geological Survey.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in, depth 15 ft.  
DATUM.--Elevation of land-surface datum is 4217.59 ft above sea level. Measuring point: Top of casing, 0.80 ft above land-surface datum.  
REMARKS.--Cluster 1, well 2.  
PERIOD OF RECORD.--June 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.53 ft below land-surface datum, Dec. 03, 1987; lowest, 3.29 ft below land-surface datum, Sep. 30, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1992	2.19	JUN 15, 1993	1.27
APR 1, 1993	1.14	SEP 16, 1993	1.65

404523113344802. LOCAL NUMBER, (C- 1-15) 7add- 3.  
LOCATION.--Lat 40°45'23", long 113°34'48", Hydrologic Unit 16020308.  
Owner: U.S. Geological Survey.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in, depth 30 ft.  
DATUM.--Elevation of land-surface datum is 4217.53 ft above sea level. Measuring point: Top of casing, 0.50 ft above land-surface datum.  
REMARKS.--Cluster 1, well 3.  
PERIOD OF RECORD.--June 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.34 ft below land-surface datum, Oct. 03, 1989; lowest, 6.92 ft below land-surface datum, June 03, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1992	2.10	JUN 15, 1993	1.93
APR 1, 1993	1.64	SEP 16, 1993	1.49

GROUND-WATER LEVELS  
TOOELE COUNTY--Continued

404523113344701. LOCAL NUMBER, (C-1-15) 7add- 4.  
LOCATION.--Lat 40°45'23", long 113°34'47", Hydrologic Unit 16020308.  
Owner: Utah State University.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 5.5 ft.  
DATUM.--Elevation of land-surface datum is 4217.64 ft above sea level. Measuring point: Top of casing, 0.50 ft above land-surface datum.  
REMARKS.--U.S.U. cluster 1, well 2.  
PERIOD OF RECORD.--July 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.58 ft below land-surface datum, Feb 13, 1990; Lowest, 3.61 ft below land-surface datum, Sep 30, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1992	2.09	JUN 15, 1993	1.23
APR 1, 1993	0.79	SEP 16, 1993	1.55

404523113344702. LOCAL NUMBER, (C-1-15) 7add- 5.  
LOCATION.--Lat 40°45'23", long 113°34'47", Hydrologic Unit 16020308.  
Owner: Utah State University.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 15.5 ft.  
DATUM.--Elevation of land-surface datum is 4217.65 ft above sea level. Measuring point: Top of casing, 1.30 ft above land-surface datum.  
REMARKS.--U.S.U. cluster 1, well 2.  
PERIOD OF RECORD.--July 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.67 ft below land-surface datum, Dec 03, 1987; lowest, 2.83 ft below land-surface datum, Sep 30, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1992	2.11	JUN 15, 1993	1.69
APR 1, 1993	1.63	SEP 16, 1993	1.60

404523113344703. LOCAL NUMBER, (C-1-15) 7add- 6.  
LOCATION.--Lat 40°45'23", long 113°34'47", Hydrologic Unit 16020308.  
Owner: Utah State University.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 0.75 in., depth 36.5 ft.  
DATUM.--Elevation of land-surface datum is 4217.59 ft above sea level. Measuring point: Top of casing, 0.60 ft above land-surface datum.  
REMARKS.--U.S.U. cluster 1, well 3.  
PERIOD OF RECORD.--July 1987 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.99 ft below land-surface datum, Nov. 16, 1990; lowest, 6.19 ft below land-surface datum, Mar 01, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1992	2.69	JUN 15, 1993	3.44
APR 1, 1993	3.58	SEP 16, 1993	3.13

401312112442301. LOCAL NUMBER, (C-7-8) 10cbd-1.  
LOCATION.--Lat 40°13'12", long 112°44'23", Hydrologic Unit 16020305.  
Owner: Dugway Proving Ground.  
AQUIFER.--Unconsolidated alluvium.  
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 175 ft, cased to 175 ft, perforated 115-175 ft.  
DATUM.--Elevation of land-surface datum is 4,850 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.  
REMARKS.--Records good.  
PERIOD OF RECORD.--November 1946 to March 1947, January 1951 to current year.  
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 73.32 ft below land-surface datum, Jan. 26, 1951; lowest, 93.67 ft below land-surface datum, Oct. 15, 1966.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	78.18	77.94	77.34	76.95	76.65	76.44	75.94	76.02	76.08	76.31	76.77	77.04
10	78.19	77.87	77.27	76.76	76.57	76.24	75.90	76.00	75.86	76.40	76.80	77.07
15	78.16	77.74	77.21	76.84	76.40	76.24	75.97	75.98	75.86	76.42	76.75	77.03
20	78.04	77.62	77.20	76.80	76.25	76.16	76.02	75.95	76.03	76.44	76.88	77.00
25	78.09	77.68	77.09	76.81	76.39	76.09	75.99	76.02	76.16	76.55	76.97	77.09
EOM	78.04	77.52	77.02	76.67	76.36	76.10	75.94	76.05	76.24	76.75	76.99	77.02



## GROUND-WATER LEVELS

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## UINTAH COUNTY

403158109372201. LOCAL NUMBER, (D-3-20)25abc-2.  
 LOCATION.--Lat 40°31'58", long 109°37'22", Hydrologic Unit 14060002.  
 Owner: H. T. Peltier.  
 AQUIFER.--Glacial outwash.  
 WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 43 ft, cased to 42 ft.  
 DATUM.--Elevation of land-surface datum is 5,992 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.  
 REMARKS.--Records good except for estimated days, which are fair.  
 PERIOD OF RECORD.--May 1965 to August 1966, March 1972 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.97 ft below land-surface datum, July 5, 1966; lowest, 8.88 ft below land-surface datum, Sept. 7, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
 DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.02	6.71	6.79	6.66	6.30	6.00	5.99	6.45	6.32	6.07	6.43	6.68
10	6.97	6.72	6.74	e6.60	e6.25	e5.95	6.29	6.57	6.18	6.17	6.34	6.65
15	6.97	6.73	6.71	e6.55	e6.20	e5.90	6.41	6.74	6.17	6.24	6.52	6.70
20	6.94	6.70	6.72	e6.50	e6.15	e5.85	6.52	6.73	6.05	6.38	6.64	6.60
25	6.83	6.74	6.73	e6.45	e6.10	5.78	6.55	6.47	6.09	6.22	6.62	6.65
EOM	6.68	6.77	6.71	e6.40	e6.05	5.78	6.69	6.42	6.14	6.46	6.72	6.71

## UTAH COUNTY

401818112014501. LOCAL NUMBER, (C-6-2)14aba-1.  
 LOCATION.--Lat 40°18'18", long 112°01'45", Hydrologic Unit 16020201.  
 Owner: Coop Security Corp.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled unused irrigation artesian well, diameter 16 in., depth 1,258 ft, cased to 1,254 ft.  
 DATUM.--Elevation of land-surface datum is 4,865.70 ft above sea level. Measuring point: Top of casing, at land-surface datum.  
 REMARKS.--Records good.  
 PERIOD OF RECORD.--December 1954 to April 1955, March 1963 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 108.76 ft below land-surface datum, May 4, 7, 1993; lowest, 141.41 ft below land-surface datum, Aug. 15, 1965.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
 DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	109.33	109.29	109.17	e109.00	e108.95	e108.90	108.85	108.77	108.88	108.87	108.94	108.88
10	109.35	109.28	109.16	e109.00	e108.95	e108.90	108.88	108.89	108.93	108.88	108.93	108.89
15	109.33	109.12	e109.06	e109.00	e108.95	e108.90	108.88	108.90	108.92	108.87	108.87	108.88
20	109.33	109.02	e109.05	e109.00	e108.95	108.87	108.92	108.88	108.91	108.91	108.90	108.91
25	109.33	109.09	e109.05	e109.00	e108.90	108.89	108.90	108.94	108.93	108.86	108.86	108.99
EOM	109.24	109.23	e109.05	e108.95	e108.90	108.91	108.90	108.95	108.87	108.91	108.90	109.04

402333111513401. LOCAL NUMBER, (D-5-1)8dcc-1.  
 LOCATION.--Lat 40°23'33", long 111°51'34", Hydrologic Unit 16020201.  
 Owner: Lehl Irrigation Co.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled unused irrigation artesian well, diameter 14 in., depth 240 ft, cased to 240 ft, perforated at 85, 105, 165, and 200 ft.  
 DATUM.--Elevation of land-surface datum is 4,555.03 ft above sea level. Measuring point: Top of recorder platform, 3.50 ft above land-surface datum.  
 REMARKS.--Water level affected by nearby pumping.  
 PERIOD OF RECORD.--September 1935 to December 1936, April 1947, March 1962 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.07 ft above land-surface datum, Apr. 10, 1983, 1984; lowest, 35.29 ft below land-surface datum, Aug. 31, 1963.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
 DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.58	23.54	22.27	21.51	20.79	20.01	18.62	20.29	19.69	21.04	21.64	20.58
10	26.82	22.87	22.06	21.40	20.66	20.06	18.65	19.26	19.02	21.06	20.44	20.98
15	27.19	22.80	21.91	21.33	20.46	19.41	18.84	19.48	19.44	21.54	19.40	20.39
20	26.49	22.79	21.96	21.05	20.22	19.47	19.34	19.47	18.76	e21.23	20.48	18.90
25	25.26	22.57	22.18	20.70	20.20	19.55	20.04	19.84	19.20	20.47	20.76	18.40
EOM	24.27	22.51	22.06	20.76	20.20	18.88	21.43	20.67	20.12	21.13	20.79	19.66

## WASHINGTON COUNTY

370231113320301. LOCAL NUMBER, (C-43-15)16dac-1.  
 LOCATION.--Lat 37°02'31", long 113°32'03", Hydrologic Unit 15010009.  
 Owner: Kent Bentley.  
 AQUIFER.--Unconsolidated alluvium.  
 WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 14 in., depth 150 ft.  
 DATUM.--Elevation of land-surface datum is 2,678.00 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.  
 REMARKS.--Records good.  
 PERIOD OF RECORD.--September 1985 to current year.  
 EXTREMES FOR PERIOD OF RECORD.--Highest water level, 40.32 ft below land-surface datum, May 8, 9, 1992; lowest, 43.73 ft below land-surface datum, Sept. 5, 21, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993  
 DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.96	42.25	42.25	42.27	41.97	41.65	40.89	40.83	40.88	41.20	41.60	41.11
10	42.06	42.27	42.29	42.14	41.90	41.48	40.83	40.83	40.90	41.27	41.65	41.14
15	42.11	42.29	42.26	42.25	41.75	41.45	40.81	40.82	40.92	41.30	41.51	41.21
20	42.11	42.23	42.37	42.20	41.65	41.36	40.84	40.75	41.01	41.37	41.47	41.25
25	42.21	42.40	42.36	42.10	41.73	41.26	40.82	40.84	41.10	41.47	41.56	41.34
EOM	42.23	42.38	42.32	41.98	41.65	41.15	40.75	40.90	41.12	41.57	41.26	41.39

## GROUND-WATER LEVELS

## WEBER COUNTY

411544111461001. LOCAL NUMBER, (A-6-2)18bad-1.

LOCATION.--Lat 41°15'44", long 111°46'10", Hydrologic Unit 16020102.

Owner: U.S. Bureau of Reclamation.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 155 ft, perforated 105-115 ft, 125-145 ft.

DATUM.--Elevation of land-surface datum is 4,924 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Records good except for estimated days, which are fair.

PERIOD OF RECORD.--January 1956 to March 1966, October 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.93 ft below land-surface datum, June 5, 1985; lowest, 34.96 ft below land-surface datum, Nov. 30, 1956.

## DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

## DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.54	30.23	29.69	29.04	27.96	27.97	19.32	14.95	10.83	10.46	14.74	20.68
10	32.24	30.07	28.82	28.80	27.80	27.53	17.52	14.90	8.42	12.66	14.09	22.35
15	32.41	29.91	29.50	28.67	27.64	25.84	16.93	15.67	8.38	14.17	14.96	22.96
20	31.11	29.72	30.12	28.47	27.53	24.69	17.75	15.28	9.10	14.95	16.91	21.15
25	31.06	29.61	29.59	28.29	27.46	23.70	17.44	16.52	10.18	11.98	16.31	e22.21
EOM	30.38	29.54	29.30	28.12	27.39	21.75	15.61	15.78	11.77	13.35	18.22	e23.06

411348112013601. LOCAL NUMBER, (B-6-2)26ada-1.

LOCATION.--Lat 41°13'48", long 112°01'36", Hydrologic Unit 16020102.

Owner: Amalgamated Sugar Company.

AQUIFER.--Unconsolidated alluvium.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 16 in., depth 595 ft, cased to 400 ft.

DATUM.--Elevation of land-surface datum is 4,275 ft above sea level. Measuring point: Top of casing, 0.10 ft below land-surface datum.

REMARKS.--Records good except for estimated days which are fair.

PERIOD OF RECORD.--August 1935 to December 1950, January 1953 to October 1961, February 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.50 ft above land-surface datum, Mar. 11, 1937; lowest, 19.67 ft. below land-surface datum, Sept. 2, 3, 1992.

## DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

## DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.00	16.84	15.80	14.77	14.29	13.61	12.90	12.20	11.62	11.57	12.16	12.39
10	17.83	16.67	15.64	14.50	14.09	13.51	12.85	12.04	11.61	11.69	12.17	12.56
15	17.67	16.54	15.48	14.40	13.96	13.38	12.76	11.93	11.56	11.79	12.14	12.73
20	17.53	16.31	15.34	14.27	13.78	13.26	12.67	11.84	11.50	11.94	12.17	12.81
25	17.40	16.14	15.23	14.28	13.67	13.17	12.54	11.76	11.50	11.98	12.19	e12.65
EOM	17.02	16.01	14.95	14.33	13.64	13.05	12.44	11.72	11.50	12.13	12.30	e12.44

e Estimated



QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

STATION NUMBER	LOCAL IDENTIFIER	GEOLOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)
BEAVER COUNTY										
383101112365301	(C-26- 7) 26cac- 1	100VFL	250.00	07-19-93	630	8.0	14.5	--	--	--
382924112592901	(C-28-10) 5add- 1	100VFL	305.00	07-13-93	880	7.9	18.0	--	--	--
382336112592601	(C-28-10) 8add- 2	100VFL	200.00	07-13-93	900	7.5	16.0	--	--	--
382204113001302	(C-28-10) 17cdc- 2	100VFL	220.00	07-13-93	700	7.9	26.0	--	--	--
382019112591701	(C-28-10) 28ccc- 1	100VFL	316.00	07-13-93	1320	7.7	16.5	--	--	--
382313113020901	(C-28-11) 12dbc- 2	100VFL	460.00	07-12-93	2380	7.3	19.5	--	--	--
382020113015701	(C-28-11) 25dcd- 1	100VFL	431.00	07-12-93	1820	7.4	18.5	--	--	--
381625112412901	(C-29- 7) 19bcd- 1	100VFL	256.00	07-19-93	560	7.2	13.0	--	--	--
381516112422201	(C-29- 8) 25cac- 1	100VFL	250.00	07-19-93	305	8.0	20.0	--	--	--
381435112471401	(C-29- 8) 31add- 1	100VFL	310.00	07-19-93	760	7.6	14.0	250	68	19
381835113000001	(C-29-10) 5cdd- 2	100VFL	95.00	07-12-93	930	7.6	17.5	--	--	--
381714113003401	(C-29-10) 18daa- 1	100VFL	298.00	07-12-93	530	7.3	17.0	--	--	--
381901113014101	(C-29-11) 1add- 1	100VFL	64.00	07-12-93	790	7.4	19.0	--	--	--
381700113033401	(C-29-11) 14cdb- 1	100VFL	--	07-12-93	440	7.9	19.5	--	--	--
381543113035501	(C-29-11) 27aad- 1	100VFL	204.00	07-12-93	840	7.6	18.0	--	--	--
BOX ELDER COUNTY										
412214112023301	(B- 7- 2) 2cba- 5	100VFL	342.00	08-10-93	410	7.6	13.5	190	60	8.8
412405112022501	(B- 8- 2) 26bcd- 1	100VFL	118.00	08-10-93	190	7.2	15.0	32	6.3	3.9
413057112023901	(B- 9- 2) 15daa- 1	100VFL	465.00	08-10-93	620	8.5	18.0	--	--	--
413300113543001	(B-10-18) 33aaa- 1	100VFL	84.00	08-12-93	1680	7.3	12.0	590	170	39
413806113543401	(B-11-18) 33adb- 1	100VFL	200.00	08-12-93	980	7.7	12.0	360	100	26
414710113071601	(B-12-11) 8abb- 1	100VFL	275.00	08-11-93	2030	7.3	15.0	920	260	66
415737112431601	(B-14- 8) 11bca- 1	100VFL	416.00	08-10-93	3120	7.2	12.0	770	170	85
415850112481201	(B-15- 8) 31ccc- 1	100VFL	550.00	08-10-93	1580	7.6	20.0	430	100	44
415956112525201	(B-15- 9) 28cbc- 1	100VFL	400.00	08-10-93	11200	7.6	26.0	2600	710	190
DAVIS COUNTY										
405535111525101	(A- 2- 1) 7aba- 4	100VFL	450.00	08-11-93	250	7.0	19.0	--	--	--
405351111540803	(B- 2- 1) 24bad- 3	100VFL	386.00	08-11-93	495	7.8	16.5	--	--	--
410340112030001	(B- 4- 2) 27aba- 1	100VFL	304.00	08-11-93	840	8.7	15.0	13	2.7	1.5
410354112135201	(B- 4- 3) 19caa- 1	100VFL	430.00	08-11-93	1160	7.9	23.0	--	--	--
410835111591501	(B- 5- 1) 30ada- 1	100VFL	900.00	08-12-93	550	7.6	12.0	--	--	--
DUCHESS COUNTY										
402114110003301	U(C- 1- 1) 33bcc- 1	123DCRV	220.00	08-04-93	495	8.5	12.0	33	8.3	3.0
402246110061501	U(C- 1- 2) 22cbb- 1	123DCRV	810.00	08-04-93	440	7.6	13.0	210	51	20
402319110025601	U(C- 1- 2) 24aaa- 1	123DCRV	260.00	08-04-93	365	7.6	12.5	180	53	12
402135110051901	U(C- 1- 2) 27ddc- 1	123DCRV	420.00	08-03-93	360	7.7	13.0	180	51	12
402116110030801	U(C- 1- 2) 36adc- 1	123DCRV	170.00	08-03-93	340	7.8	12.0	170	48	12
401940110023601	U(C- 2- 1) 7bbd- 1	123DCRV	820.00	08-03-93	445	8.1	14.5	65	18	4.9
401919109593201	U(C- 2- 1) 9dad- 1	123DCRV	740.00	08-05-93	750	9.2	15.0	4	0.91	0.32
401823109590401	U(C- 2- 1) 15cac- 1	124UINT	600.00	08-04-93	570	9.2	17.0	5	1.5	0.41
401946110044601	U(C- 2- 2) 11bab- 1	123DCRV	666.00	08-03-93	365	7.9	14.0	170	45	15
401819110041601	U(C- 2- 2) 14ddb- 1	123DCRV	465.00	08-04-93	420	7.7	14.0	130	34	11
IRON COUNTY										
375257112483501	(C-33- 8) 31ccc- 1	100VFL	450.00	07-20-93	435	7.9	15.0	170	36	20
375151112525002	(C-34- 9) 9bbd- 2	100VFL	324.00	07-20-93	530	7.5	12.0	--	--	--
375006112554801	(C-34-10) 24abc- 1	100VFL	135.00	08-02-93	530	7.7	16.0	--	--	--
374834113384301	(C-34-16) 28dcc- 2	100VFL	148.00	07-12-93	1150	7.7	13.0	--	--	--
374753113464601	(C-34-17) 32cca- 1	100VFL	306.00	07-12-93	565	7.7	19.5	--	--	--
374619113053101	(C-35-11) 9dba- 1	100VFL	--	07-20-93	670	7.7	18.5	--	--	--
374550113040601	(C-35-11) 11ccc- 1	100VFL	263.00	07-20-93	920	7.6	15.0	420	81	53
374248113075201	(C-35-11) 31ddb- 1	100VFL	--	07-19-93	660	7.8	15.0	--	--	--
374304113052901	(C-35-11) 33aac- 1	100VFL	136.00	07-19-93	1190	7.1	12.5	--	--	--
374649113305801	(C-35-15) 3dccc- 3	100VFL	316.00	07-12-93	1490	7.8	15.5	660	160	63
374623113381301	(C-35-16) 9add- 1	100VFL	150.00	07-12-93	1010	7.4	13.0	--	--	--
374227113394101	(C-35-16) 32dcd- 2	100VFL	140.00	07-12-93	560	7.7	17.5	--	--	--
374105113085001	(C-36-12) 12dba- 1	100VFL	600.00	07-20-93	580	7.8	15.0	--	--	--
374209113322203	(C-36-15) 4bad- 3	100VFL	320.00	07-12-93	750	8.0	22.0	--	--	--
374040113343102	(C-36-15) 7cdd- 2	100VFL	500.00	07-12-93	1050	7.9	24.5	--	--	--
374014113391101	(C-36-16) 9bcd- 2	100VFL	--	07-13-93	435	7.7	15.5	--	--	--
373854113411501	(C-36-16) 19abb- 1	100VFL	352.00	07-13-93	470	7.7	13.0	--	--	--
373656113415201	(C-36-17) 36aad- 1	100VFL	363.00	07-13-93	490	7.6	11.5	--	--	--
373542113122401	(C-37-12) 9acc- 1	100VFL	186.00	08-02-93	365	7.5	16.5	--	--	--
373407113100801	(C-37-12) 23acb- 2	100VFL	365.00	07-20-93	600	--	17.5	240	55	24
373236113111401	(C-37-12) 34abb- 1	100VFL	190.00	07-20-93	860	7.1	12.0	--	--	--

## GEOLOGICAL UNIT (AQUIFER):

100VFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.  
110ALVM - ALLUVIUM, QUATERNARY AGE.  
111ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.  
122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

323

DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	ALKA- LINITY (CAO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
BEAVER COUNTY												
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64	6.0	287	61	44	0.70	50	492	1.60	0.090	4	<1	160
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BOX ELDER COUNTY												
10	1.4	166	18	16	<0.10	13	231	1.00	<0.010	5	<1	<10
27	3.6	74	8.7	7.2	0.10	15	119	0.650	0.140	31	3	30
110	8.9	258	160	280	0.20	45	972	0.880	<0.010	<3	<1	200
56	8.9	281	91	91	0.30	46	592	0.950	0.020	<3	<1	140
120	13	145	55	640	<0.10	23	1280	3.00	<0.010	<10	<10	110
330	18	254	320	640	0.80	47	1770	1.30	0.040	10	<10	180
120	4.8	157	35	350	0.20	20	770	0.480	0.030	7	<1	80
1300	69	109	49	3500	<0.10	74	5960	0.740	0.080	30	10	180
DAVIS COUNTY												
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190	8.5	406	0.40	31	0.50	26	505	<0.050	0.580	66	5	450
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DUCHESE COUNTY												
100	1.4	--	86	0.70	1.7	7.3	--	--	--	220	3	110
12	3.3	--	30	2.9	0.50	8.2	--	--	--	1200	15	60
4.7	3.8	--	48	0.80	0.70	8.0	--	--	--	460	20	30
4.3	3.1	--	39	0.60	0.50	8.7	--	--	--	730	14	20
4.1	3.5	--	38	0.60	0.70	8.0	--	--	--	200	22	30
85	2.3	--	44	12	1.2	9.5	--	--	--	440	9	120
170	0.70	--	74	32	1.2	9.0	--	--	--	53	6	70
120	0.70	--	52	23	0.70	9.1	--	--	--	30	3	60
8.0	3.2	--	50	1.6	0.50	9.5	--	--	--	95	15	50
38	2.5	--	50	2.3	0.60	9.4	--	--	--	170	10	140
IRON COUNTY												
19	2.6	179	19	19	0.20	28	257	1.30	0.030	<3	<1	40
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28	4.5	166	250	34	0.30	34	626	9.40	0.020	<3	<1	70
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78	5.7	130	380	190	0.30	57	1020	1.40	0.030	<3	7	260
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34	1.4	154	110	31	0.20	18	378	2.70	0.020	3	1	90
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GEOLOGICAL UNIT (AQUIFER) --CONTINUED

123DCRV - DUCHESE RIVER FORMATION, OLIGOCENE AGE.  
124UINT - UINTAH FORMATION, EOCENE AGE.  
220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.  
220JRSC - JURASSIC SYSTEM, JURASSIC AGE.

QUALITY OF GROUND WATER  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

STATION NUMBER	LOCAL IDENT- IFIER	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)
JUAB COUNTY										
394545111531001	(C-12- 1) 24baa- 1	100VLFL	66.00	08-05-93	890	--	12.5	360	87	34
		100VLFL	66.00	09-10-93	1220	--	12.5	--	--	--
393342111534501	(C-14- 1) 26dbd- 1	100VLFL	595.00	08-02-93	1130	--	14.0	--	--	--
393313111524001	(C-14- 1) 36adb- 1	100VLFL	359.00	07-19-93	1360	--	13.0	--	--	--
393236111525300	(C-15- 1) 1baa- 1	100VLFL	280.00	07-20-93	1240	--	12.5	--	--	--
			280.00	08-19-93	1850	7.2	13.0	--	--	--
393208111525201	(C-15- 1) 1caa- 1	100VLFL	252.00	07-20-93	1240	--	12.0	--	--	--
393231111550201	(C-15- 1) 3abb- 2	100VLFL	493.00	07-21-93	870	--	14.0	--	--	--
393212111543401	(C-15- 1) 3add- 1	100VLFL	--	07-21-93	1160	--	13.0	--	--	--
		100VLFL	--	07-21-93	1160	--	13.0	--	--	--
393106111551001	(C-15- 1) 10cad- 1	100VLFL	224.00	07-22-93	1550	--	15.0	--	--	--
393141111535901	(C-15- 1) 11baa- 1	100VLFL	260.00	07-20-93	1550	--	--	--	--	--
395245111502501	(D-11- 1) 9bbb- 2	100VLFL	70.00	07-19-93	550	--	12.0	--	--	--
		100VLFL	70.00	07-27-93	519	7.8	12.0	250	53	28
395212111502201	(D-11- 1) 9cbc- 1	100VLFL	401.00	07-21-93	530	--	12.5	--	--	--
395207111501401	(D-11- 1) 9cca- 1	100VLFL	304.00	07-21-93	500	--	13.0	--	--	--
395110111505001	(D-11- 1) 16ccb- 1	100VLFL	384.00	07-19-93	490	--	12.5	--	--	--
395100111503501	(D-11- 1) 20aab- 1	100VLFL	311.00	07-20-93	590	--	12.0	--	--	--
		100VLFL	311.00	07-27-93	577	7.6	12.0	270	65	26
394951111521101	(D-11- 1) 30bda- 1	100VLFL	34.00	09-09-93	630	--	11.0	--	--	--
394848111500201	(D-11- 1) 33cab- 1		452.00	07-29-93	490	7.6	11.0	230	55	22
394421111505001	(D-12- 1) 29cad- 1		300.00	08-04-93	1440	7.4	12.0	470	130	35
394323111515501	(D-12- 1) 31cac- 1	100VLFL	--	07-22-93	1010	--	12.5	--	--	--
394225111495701	(D-13- 1) 4cca- 1	100VLFL	371.00	07-22-93	1680	--	11.5	--	--	--
394226111501601	(D-13- 1) 5dda- 1	100VLFL	336.00	07-21-93	1370	--	11.5	--	--	--
394226111502101	(D-13- 1) 5ddb- 3	100VLFL	350.00	07-01-93	1550	7.1	11.0	--	--	--
		100VLFL	350.00	08-04-93	1080	7.3	11.0	480	130	37
394137111515001	(D-13- 1) 7dbc- 1	100VLFL	210.00	07-15-93	1360	7.2	11.5	--	--	--
			210.00	07-27-93	1370	7.3	11.5	410	98	41
393400111511501	(D-14- 1) 30add- 1	100VLFL	312.00	07-22-93	930	--	13.0	--	--	--
393315111511601	(D-14- 1) 31ada- 1	100VLFL	405.00	07-20-93	1800	--	13.0	--	--	--
393312111521001	(D-14- 1) 31bcb- 1	100VLFL	472.00	07-20-93	1260	--	13.0	--	--	--
393154111520301	(D-15- 1) 6cab- 1	100VLFL	315.00	07-19-93	1750	--	13.0	--	--	--
KANE COUNTY										
370843112340602	(C-42- 6) 19bdc- 2	220NVJO	250.00	07-14-93	260	8.2	14.5	--	--	--
370050112274501	(C-44- 5) 6cbb- 1		--	07-14-93	2610	7.4	17.0	--	--	--
MILLARD COUNTY										
393154112192901	(C-15- 4) 8cba- 1	100VLFL	203.00	06-30-93	3400	7.1	14.0	1000	220	110
393102112194401	(C-15- 4) 18daa- 1	100VLFL	406.00	06-30-93	3110	7.1	16.0	1300	270	140
392859112154601	(C-15- 4) 26dcc- 1		660.00	06-30-93	945	7.4	15.0	370	98	30
393113112215701	(C-15- 5) 13bbc- 1	100VLFL	310.00	06-30-93	2160	7.5	14.0	--	--	--
392359112431202	(C-16- 8) 26bdb- 2		844.00	07-01-93	910	8.4	26.5	34	6.3	4.4
391234112233701	(C-18- 5) 34adb- 3		512.00	07-07-93	2000	7.1	17.5	850	180	97
390758112194601	(C-19- 4) 29bcd- 1		390.00	07-07-93	1040	7.1	14.5	--	--	--
385939112272303	(C-21- 5) 7cdd- 3		--	08-19-93	1330	7.3	12.5	470	110	48
390005112262301	(C-21- 5) 8bdc- 2	100VLFL	407.00	07-07-93	880	7.5	17.0	330	76	34
385714112264701	(C-21- 5) 29cbc- 1		900.00	07-08-93	2400	7.1	19.5	--	--	--
385715112271201	(C-21- 5) 30dbc- 3	100VLFL	773.00	07-08-93	1730	7.2	19.0	--	--	--
390045112281201	(C-21- 6) 1ddb- 1	112PVNT	105.00	07-07-93	1820	7.5	13.0	610	140	63
385511112243501	(C-22- 5) 10bbb- 2		338.00	07-08-93	1450	7.2	16.5	--	--	--
385303112234801	(C-22- 5) 22adc- 2	100VLFL	260.00	07-08-93	1340	7.2	15.5	--	--	--
385026112261001	(C-23- 5) 5acd- 1	100VLFL	353.00	08-19-93	830	7.7	14.5	--	--	--
384953112325101	(C-23- 6) 8abd- 1	100VLFL	200.00	07-08-93	7850	6.9	15.0	--	--	--
384910112321401	(C-23- 6) 9ccd- 1	100VLFL	136.00	07-08-93	5770	7.1	16.0	--	--	--
384850112310701	(C-23- 6) 15bca- 1		145.00	08-19-93	3920	7.5	15.0	910	250	70
384856112315701	(C-23- 6) 16bad- 1		130.00	07-08-93	4780	7.3	15.0	--	--	--
384829112315901	(C-23- 6) 16cda- 1	112PVNT	205.00	07-08-93	4480	7.1	14.0	--	--	--
384751112312201	(C-23- 6) 21add- 1	100VLFL	445.00	07-08-93	1220	7.6	14.5	--	--	--
384748112315801	(C-23- 6) 21bdd- 1	100VLFL	415.00	07-08-93	6870	7.0	13.5	2300	510	240
PIUTE COUNTY										
381003112010301	(C-30- 2) 28bdc- 1		135.00	07-14-93	420	7.9	14.0	--	--	--

## GEOLOGICAL UNIT (AQUIFER):

100VLFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.  
 110ALVM - ALLUVIUM, QUATERNARY AGE.  
 111ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.  
 122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

325

DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	ALKA- LINITY (CACO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
JUAB COUNTY												
110	4.3	246	81	180	0.20	28	695	5.00	0.020	<3	<1	630
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13	1.0	212	29	21	0.10	12	289	1.00	<0.010	5	<1	30
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17	1.0	222	44	24	0.10	11	329	1.80	<0.010	<3	3	30
7.5	0.70	188	36	14	0.50	7.6	261	1.10	0.100	<3	<1	<10
120	3.6	381	86	180	0.20	22	821	3.60	0.010	<3	<1	70
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140	3.7	386	100	190	0.20	24	878	4.90	0.010	3	<1	80
110	2.9	292	82	190	0.10	24	744	4.70	0.060	<3	<1	80
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KANE COUNTY												
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MILLARD COUNTY												
320	8.5	362	520	680	0.30	28	2110	0.710	<0.010	130	460	460
180	7.3	249	470	620	0.30	28	1880	2.80	<0.010	40	30	340
35	1.8	162	140	87	0.20	13	555	12.0	<0.010	<3	<1	60
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170	1.6	196	60	120	1.3	31	513	0.061	<0.010	4	3	310
73	3.6	237	160	400	<0.10	22	1120	9.00	0.100	<3	2	160
100	3.9	349	170	120	0.20	26	812	5.50	0.030	<3	<1	340
51	2.1	238	88	80	0.10	22	505	2.00	<0.020	<3	1	140
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150	6.0	353	280	230	0.10	30	1160	12.0	0.030	<3	2	490
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460	55	326	530	660	5.6	37	2280	3.20	0.020	<10	<10	2500
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730	47	260	1400	1500	0.30	37	4680	14.0	<0.020	3	<1	2500
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PIUTE COUNTY												
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GEOLOGICAL UNIT (AQUIFER)--CONTINUED

123DCRV - DUCHESNE RIVER FORMATION, OLIGOCENE AGE.  
124UINT - UINTAH FORMATION, EOCENE AGE.  
220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.  
220JRSC - JURASSIC SYSTEM, JURASSIC AGE.



QUALITY OF GROUND WATER  
 WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

STATION NUMBER	LOCAL IDENT- IFIER	GEO- LOGIC UNIT	TOTAL DEPTH OF WELL (FT)	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
SALT LAKE COUNTY										
405047112014301	(B- 1- 2) 2dac-	1	100VFL	440.00	07-22-93	870	8.1	25.5	--	--
404659112005601	(B- 1- 2) 36baa-	1	100VFL	464.00	07-22-93	6200	7.5	25.0	--	--
403408111543201	(C- 3- 1) 12ccb-	1	100VFL	118.00	07-23-93	940	7.4	19.0	--	--
402721111550801	(C- 4- 1) 23dbb-	1	100VFL	262.00	07-20-93	1340	7.4	20.0	370	84
403027112012401	(C- 4- 2) 1bbb-	1	100VFL	540.00	07-20-93	1270	7.3	15.5	480	140
404506111523301	(D- 1- 1) 7abd-	6	100VFL	130.00	07-21-93	1220	7.0	13.5	530	130
403742111503201	(D- 2- 1) 21dbc-	1	100VFL	740.00	07-21-93	290	7.9	10.5	--	--
403116111524801	(D- 3- 1) 31abb-	1	100VFL	138.00	07-20-93	560	7.2	19.0	--	--
SAN JUAN COUNTY										
371716109325501	(D-40-22) 30bbb-	1	220JRSC	825.00	03-02-93	810	9.1	14.5	--	--
371621109211001	(D-40-23) 27baa-	1	220JRSC	672.00	03-02-93	3110	7.6	19.5	--	--
SANPETE COUNTY										
390819111530701	(C-19- 1) 23cac-	1	110ALVM	--	07-15-93	2900	7.2	13.5	--	--
393715111375301	(D-14- 3) 7abb-	1	300.00	03-02-93	--	--	--	--	--	--
392740111345301	(D-16- 3) 4aaa-	1	100VFL	160.00	03-02-93	1130	7.2	4.0	340	73
391634111380701	(D-18- 2) 1daa-	2	100VFL	233.00	03-03-93	--	--	--	--	38
SEVIER COUNTY										
385910111512101	(C-21- 1) 13abd-	1	291.00	07-15-93	730	--	17.0	150	27	19
384757112002201	(C-23- 2) 15dcb-	4	75.00	07-15-93	660	7.6	12.0	--	--	--
384702112031001	(C-23- 2) 19dab-	1	110ALVM	310.00	07-15-93	550	7.5	19.5	--	--
384450112034001	(C-24- 2) 6abc-	1	110ALVM	308.00	07-15-93	1020	7.4	12.5	--	--
383140111522001	(C-26- 1) 23ddb-	1	100VFL	200.00	07-14-93	180	8.3	13.0	--	--
TOOELE COUNTY										
403914112400301	(C- 2- 7) 7dda-	1	505.00	08-13-93	4550	7.6	19.0	350	76	40
400418112271701	(C- 8- 5) 31ccd-	5	60.00	08-09-93	1190	7.0	12.5	390	120	23
UTAH COUNTY										
401607112023401	(C- 6- 2) 26cbb-	1	100VFL	505.00	07-13-93	580	7.5	11.0	--	--
401610112053101	(C- 6- 2) 29bdd-	1	100VFL	150.00	07-13-93	412	7.4	10.0	--	--
395956111572101	(C- 9- 1) 28ccb-	1	802.00	07-12-93	969	7.3	18.0	240	63	20
402259111525201	(D- 5- 1) 18cab-	2	618.00	07-13-93	283	7.7	14.0	--	--	--
402145111531101	(D- 5- 1) 19ccc-	1	110ALVM	150.00	07-13-93	443	7.9	13.0	--	--
4021031114461601	(D- 5- 2) 30ccb-	2	225.00	07-13-93	773	6.8	11.0	--	--	--
401801111442501	(D- 6- 2) 17aca-	1	200.00	07-13-93	506	7.3	14.0	--	--	--
401414111435301	(D- 7- 2) 4cbb-	2	144.00	07-13-93	517	7.4	14.0	--	--	--
401021111362701	(D- 7- 3) 33baa-	6	100VFL	138.00	07-09-93	515	7.3	13.0	260	69
400941111352701	(D- 7- 3) 34cdb-	1	100VFL	445.00	07-12-93	542	7.2	12.0	--	21
400311111432001	(D- 9- 2) 9bac-	1	100VFL	436.00	07-12-93	622	6.7	14.0	--	--
WASHINGTON COUNTY										
373456113423501	(C-37-17) 12bdc-	2	290.00	07-13-93	400	7.5	12.0	--	--	--
371305113470401	(C-41-17) 17cba-	1	626.00	07-13-93	470	7.5	19.5	--	--	--
370517113310402	(C-42-15) 34dba-	2	265.00	08-25-93	5340	6.7	17.5	2300	600	190
370036113282801	(C-43-14) 31bbb-	1	--	07-13-93	3300	7.3	20.5	--	--	--
WAYNE COUNTY										
382717111365601	(D-27- 3) 19aaa-	1	285.00	07-14-93	1550	7.2	11.0	--	--	--
381902111321101	(D-29- 3) 1cab-	1	110ALVM	433.00	07-14-93	220	8.1	19.0	--	--
WEBER COUNTY										
411153112064601	(B- 5- 2) 6bdd-	4	100VFL	303.00	08-10-93	495	7.8	13.5	--	--
412011112041401	(B- 7- 2) 16dcd-	2	100VFL	1176.00	08-10-93	350	7.9	22.0	91	32
411824112060601	(B- 7- 2) 32bbb-	1	546.00	08-10-93	2440	7.6	19.0	--	--	2.8
			546.00	08-10-93	460	7.9	16.0	--	--	--

## GEOLOGICAL UNIT (AQUIFER):

100VFL - VALLEY FILL OR BASIN FILL, CENOZOIC AGE.  
 110ALVM - ALLUVIUM, QUATERNARY AGE.  
 111ALVM - HOLOCENE ALLUVIUM, HOLOCENE AGE.  
 122BRHD - BRIAN HEAD FORMATION, MIOCENE AGE.

QUALITY OF GROUND WATER  
WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

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DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	ALKA- LINITY (CACO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) TUENTS (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)
SALT LAKE COUNTY												
--	--	--	--	--	--	--	--	--	--	--	--	--
120	9.7	242	190	170	0.60	27	792	1.30	0.050	23	1	270
52	7.7	202	79	210	0.20	50	701	1.90	0.060	<3	<1	100
40	2.7	284	170	120	0.20	19	727	5.80	0.050	19	17	110
--	--	--	--	--	--	--	--	--	--	--	--	--
SAN JUAN COUNTY												
--	--	--	--	--	--	--	--	--	--	--	--	--
SANPETE COUNTY												
94	7.5	334	110	96	0.20	51	677	1.60	0.030	7	<1	150
--	--	--	--	--	--	--	--	--	--	--	--	--
SEVIER COUNTY												
94	4.4	113	89	110	0.50	23	437	0.030	<0.020	6	<1	330
--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--
TOOELE COUNTY												
830	33	161	110	1300	0.40	27	2520	1.60	0.020	130	<10	360
46	1.7	134	49	250	<0.10	16	592	1.30	0.010	<3	<1	40
UTAH COUNTY												
98	12	138	99	170	0.30	67	630	4.10	0.020	3	<1	130
--	--	--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--
12	1.6	233	43	11	0.10	11	312	0.800	0.030	<3	<1	30
--	--	--	--	--	--	--	--	--	--	--	--	--
WASHINGTON COUNTY												
490	20	240	2000	670	0.50	23	4160	5.30	<0.010	30	<10	1100
--	--	--	--	--	--	--	--	--	--	--	--	--
WAYNE COUNTY												
--	--	--	--	--	--	--	--	--	--	--	--	--
WEBER COUNTY												
120	15	235	<0.10	100	1.9	37	--	<0.050	0.040	360	95	470
--	--	--	--	--	--	--	--	--	--	--	--	--

GEOLOGICAL UNIT (AQUIFER)--CONTINUED

123DCRV - DUCHESNE RIVER FORMATION, OLIGOCENE AGE.  
124UINT - UINTAH FORMATION, EOCENE AGE.  
220NVJO - NAVAJO SANDSTONE OF GLEN CANYON GROUP, JURASSIC-TRIASSIC AGE.  
220JRSC - JURASSIC SYSTEM, JURASSIC AGE.

QUALITY OF GROUND WATER IN WEST POND AREA  
WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

STATION NUMBER	LOCAL IDENT- IFIER	DATE	TIME	DEPTH OF WELL, TOTAL (FEET)	TEMPER- ATURE WATER (DEG C)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA)
404407113283101	(C- 1-14) 18bad- 3	12-10-92	1130	23.00	10.0	--	--	--	--
		04-01-93	1745	23.00	9.0	140000	910	1900	43000
		06-18-93	1545	23.00	15.5	144000	890	1800	46000
		09-16-93	1600	23.00	19.0	141000	930	1900	43000
404408113283101	(C- 1-14) 18bad- 2	12-10-92	1120	6.50	10.0	134000	1300	1500	40000
		04-01-93	1730	6.50	9.0	--	--	--	--
		06-18-93	1525	6.50	16.0	138000	1200	1300	42000
		09-16-93	1545	6.50	18.5	137000	1400	1600	40000
404408113283201	(C- 1-14) 18bad- 1	12-10-92	1115	8.50	8.5	--	--	--	--
		04-01-93	1715	8.50	9.0	137000	1300	1600	42000
		06-18-93	1500	8.50	17.0	146000	1100	1500	50000
		09-16-93	1530	8.50	19.0	142000	1400	2100	40000
404522113344901	(C- 1-15) 7add- 1	12-14-92	1255	3.00	6.0	--	--	--	--
		04-01-93	1430	3.00	11.0	179000	1400	2900	65000
		06-15-93	1355	3.00	20.5	--	--	--	--
		09-16-93	1320	3.00	22.0	--	--	--	--
404523113344701	(C- 1-15) 7add- 4	12-10-92	1310	5.50	12.0	--	--	--	--
		04-01-93	1335	5.50	10.0	--	--	--	--
		06-15-93	1215	5.50	18.0	175000	1500	2000	61000
		09-16-93	1220	5.50	20.0	171000	1500	2100	58000
404523113344702	(C- 1-15) 7add- 5	12-10-92	1325	15.50	13.0	--	--	--	--
		04-01-93	1415	15.50	11.5	168000	1500	2300	59000
		06-15-93	1305	15.50	16.5	173000	1400	2300	59000
		09-16-93	1300	15.50	19.0	173000	1500	2600	60000
404523113344703	(C- 1-15) 7add- 6	12-14-92	1155	36.50	13.0	--	--	--	--
		04-01-93	1400	36.50	12.0	154000	1200	2300	51000
		06-15-93	1330	36.50	14.5	159000	1300	2400	75000
		09-16-93	1240	36.50	19.0	154000	1200	2500	49000
404523113344801	(C- 1-15) 7add- 2	12-14-92	1315	15.00	11.0	--	--	--	--
		04-01-93	1600	15.00	10.0	--	--	--	--
		06-15-93	1420	15.00	17.0	187000	1400	3400	68000
		06-15-93	1445	15.00	15.0	--	--	--	--
		09-16-93	1330	15.00	20.0	--	--	--	--
404523113344802	(C- 1-15) 7add- 3	12-14-92	1325	30.00	11.0	--	--	--	--
		04-01-93	1615	30.00	10.5	--	--	--	--
		09-16-93	1335	30.00	18.5	--	--	--	--
405028113361901	(B- 1-15) 7cab- 4	12-15-92	1320	5.00	8.5	--	--	--	--
		03-31-93	1150	5.00	11.0	193000	1300	2100	76000
		06-16-93	1230	5.00	17.5	198000	1500	2100	81000
		09-15-93	1140	5.00	22.0	192000	1400	2300	77000
405028113361902	(B- 1-15) 7cab- 5	12-15-92	1400	19.00	10.5	--	--	--	--
		03-31-93	1200	19.00	12.0	179000	1300	2500	64000
		06-16-93	1310	19.00	17.0	183000	1300	2600	65000
		09-15-93	1240	19.00	21.5	178000	1300	2600	64000
405028113361903	(B- 1-15) 7cab- 6	12-15-92	1445	36.00	7.0	149000	1300	2600	47000
		03-31-93	1230	36.00	11.0	149000	1300	2500	48000
		06-16-93	1335	36.00	17.0	153000	1400	2500	47000
		09-15-93	1250	36.00	21.5	150000	1400	2000	46000
405028113362001	(B- 1-15) 7cab- 1	03-31-93	1350	6.00	14.0	--	--	--	--
		06-16-93	1355	6.00	19.5	--	--	--	--
		09-15-93	1315	6.00	23.5	--	--	--	--
405028113362101	(B- 1-15) 7cab- 3	12-15-92	1300	30.00	9.0	--	--	--	--
		03-31-93	1445	30.00	12.5	--	--	--	--
		06-16-93	1550	30.00	16.0	--	--	--	--
		09-15-93	1350	30.00	21.0	--	--	--	--
405028113362102	(B- 1-15) 7cab- 2	12-15-92	1215	15.00	11.0	--	--	--	--
		03-31-93	1500	15.00	10.5	191000	1500	2100	77000
		06-16-93	1530	15.00	17.0	196000	1500	2100	77000
		09-15-93	1340	15.00	22.0	190000	1600	2300	75000
405028113362401	(B- 1-15) 7cba- 2	12-14-92	1430	15.00	12.5	--	--	--	--
		04-01-93	1145	15.00	10.5	192000	1500	2100	77000
		06-18-93	1330	15.00	17.0	197000	1400	2000	80000
		09-15-93	1410	15.00	21.5	189000	1500	2200	72000
405028113362501	(B- 1-15) 7cba- 1	04-01-93	1130	6.00	10.5	--	--	--	--
405028113362502	(B- 1-15) 7cba- 3	12-14-92	1520	30.00	12.0	--	--	--	--
		04-01-93	1210	30.00	12.0	--	--	--	--
		06-16-93	1330	30.00	15.0	--	--	--	--
		09-15-93	1420	30.00	20.0	--	--	--	--

QUALITY OF GROUND WATER IN WEST POND AREA--Continued  
WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

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LOCAL IDENT- IFIER	DATE	POTAS- SIUM, TOTAL, RECOV- ERABLE (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	TEMP- ERATURE SPEC. GRAVITY MEAS- UREMENT (DEG C)	SPE- CIFIC GRAVITY
(C -1-14)18bad- 3	12-10-92	--	--	--	--	20.0	1.092
	04-01-93	1900	61000	5200	138000	20.0	1.090
	06-18-93	--	70000	5400	133000	20.0	1.092
	09-16-93	1800	71000	5300	130000	20.0	1.091
(C- 1-14)18bad- 2	12-10-92	2300	8500	6500	121000	20.0	1.085
	04-01-93	--	--	--	--	20.0	1.084
	06-18-93	3000	66000	4700	125000	20.0	1.086
	09-16-93	1900	62000	4600	117000	20.0	1.085
(C- 1-14)18bad- 1	12-10-92	--	--	--	--	20.0	1.088
	04-01-93	2200	59000	4400	128000	20.0	1.088
	06-18-93	1800	72000	6000	136000	20.0	1.094
	09-16-93	2000	71000	5800	130000	20.0	1.093
(C- 1-15) 7add- 1	12-14-92	--	--	--	--	20.0	1.145
	04-01-93	3700	94000	8200	198000	20.0	1.138
	06-15-93	--	--	--	--	20.0	1.138
	09-16-93	--	--	--	--	20.0	1.142
(C- 1-15) 7add- 4	12-10-92	--	--	--	--	20.0	1.117
	04-01-93	--	--	--	--	20.0	1.114
	06-15-93	2800	100000	5600	179000	20.0	1.119
	09-16-93	2500	98000	5400	172000	20.0	1.120
(C- 1-15) 7add- 5	12-10-92	--	--	--	--	20.0	1.120
	04-01-93	3100	85000	5800	177000	20.0	1.118
	06-15-93	3900	97000	6100	173000	20.0	1.116
	09-16-93	2600	94000	6900	184000	20.0	1.125
(C- 1-15) 7add- 6	12-14-92	--	--	--	--	20.0	1.104
	04-01-93	2700	73000	2900	155000	20.0	1.102
	06-15-93	3000	82000	5700	154000	20.0	1.103
	09-16-93	2400	81000	5700	154000	20.0	1.104
(C- 1-15) 7add- 2	12-14-92	--	--	--	--	20.0	1.111
	04-01-93	--	--	--	--	20.0	1.111
	06-15-93	3000	98000	9000	213000	20.0	1.113
	09-16-93	--	--	--	--	20.0	1.110
(C- 1-15) 7add- 3	12-14-92	--	--	--	--	20.0	1.112
	04-01-93	--	--	--	--	20.0	1.112
	06-15-93	--	--	--	--	20.0	1.110
	09-16-93	--	--	--	--	20.0	1.114
(B- 1-15) 7cab- 4	12-15-92	--	--	--	--	20.0	1.150
	03-31-93	3100	100000	5500	226000	20.0	1.148
	06-16-93	2500	120000	5600	228000	20.0	1.146
	09-15-93	2500	130000	5400	223000	20.0	1.146
(B- 1-15) 7cab- 5	12-15-92	--	--	--	--	20.0	1.133
	03-31-93	2800	83000	6200	200000	20.0	1.130
	06-16-93	2900	110000	5500	187000	20.0	1.129
	09-15-93	2700	110000	5800	194000	20.0	1.128
(B- 1-15) 7cab- 6	12-15-92	2400	81000	7700	143000	20.0	1.101
	03-31-93	2600	64000	6200	147000	20.0	1.099
	06-16-93	2200	77000	6100	147000	20.0	1.100
	09-15-93	2100	79000	6200	143000	20.0	1.100
(B- 1-15) 7cab- 1	03-31-93	--	--	--	--	20.0	1.162
	06-16-93	--	--	--	--	20.0	1.162
	09-15-93	--	--	--	--	20.0	1.164
(B- 1-15) 7cab- 3	12-15-92	--	--	--	--	20.0	1.154
	03-31-93	--	--	--	--	20.0	1.151
	06-16-93	--	--	--	--	20.0	1.151
	09-15-93	--	--	--	--	20.0	1.147
(B- 1-15) 7cab-2	12-15-92	--	--	--	--	20.0	1.150
	03-31-93	3100	110000	4900	219000	20.0	1.143
	06-16-93	2900	120000	5500	222000	20.0	1.146
	09-15-93	2500	110000	5400	214000	20.0	1.144
(B- 1-15) 7cba- 2	12-14-92	--	--	--	--	20.0	1.145
	04-01-93	3100	110000	5500	227000	20.0	1.147
	06-18-93	2300	120000	5600	218000	20.0	1.145
	09-15-93	2600	110000	5700	215000	20.0	1.145
(B- 1-15) 7cba- 1	04-01-93	--	--	--	--	20.0	1.155
(B- 1-15) 7cba- 3	12-14-93	--	--	--	--	20.0	1.124
	04-01-93	--	--	--	--	20.0	1.095
	06-16-93	--	--	--	--	20.0	1.121
	09-15-93	--	--	--	--	20.0	1.124

## QUALITY OF GROUND WATER IN SELECTED WELLS IN DUCHESNE COUNTY, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

STATION NUMBER	LOCAL IDENTIFIER	DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	HARDNESS TOTAL (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
401819110041601	U(C-2-2)14ddb-1	08-04-93	0830	420	7.7	14.0	130	34	11	38
401823109590401	U(C-2-1)15cac-1	08-04-93	1500	570	9.2	17.0	5	1.5	0.41	120
401919109593201	U(C-2-1)9dad-1	08-05-93	1015	750	9.2	15.0	4	0.91	0.32	170
401940110023601	U(C-2-1)7bbd-1	08-03-93	1300	445	8.1	14.5	65	18	4.9	85
401946110044601	U(C-2-2)11bab-1	08-03-93	1415	365	7.9	14.0	170	45	15	8.0
401950109592501	U(C-2-1)10bbb-1	07-29-93	0920	15000	7.9	40.0	450	150	15	3400
402114110003301	U(C-1-1)33bcc-1	08-04-93	0930	495	8.5	12.0	33	8.3	3.0	100
402116110030801	U(C-1-2)36adc-1	08-03-93	1900	340	7.8	12.0	170	48	12	4.1
402135110051901	U(C-1-2)27ddc-1	08-03-93	1520	360	7.7	13.0	180	51	12	4.3
402157110063501	U(C-1-2)28dba-1	07-29-93	1115	17900	7.7	29.5	950	280	57	3900
402246110061501	U(C-1-2)22cbb-1	08-04-93	0955	440	7.6	13.0	210	51	20	12
402319110025601	U(C-1-2)24aaa-1	08-04-93	1400	365	7.6	12.5	180	53	12	4.7
402326110034401	U(C-1-2)13cca-1	07-29-93	1415	12300	7.9	45.0	520	180	15	2500
402507110051301	U(C-1-2)3ddd-1	07-29-93	1235	11500	7.8	45.0	260	83	9.4	2600
402541110011901	U(C-1-1)5bda-1	07-29-93	1315	20100	8.1	71.0	230	72	10	3900

STATION NUMBER	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	BROMIDE, DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG C DIS-SOLVED (MG/L)	BARIUM, DIS-SOLVED (UG/L AS BA)
401819110041601	38	1	2.5	50	0.60	0.030	0.003	9.4	233	42
401823109590401	98	22	0.70	52	2.3	0.020	0.003	9.1	329	18
401919109593201	99	39	0.70	74	32	1.2	0.030	0.009	9.0	439
401940110023601	73	5	2.3	44	12	1.2	0.040	0.002	9.5	283
401946110044601	9	0.3	3.2	50	1.6	0.50	0.020	0.002	9.5	213
401950109592501	94	71	31	330	3600	28	17	9.6	9580	400
402114110003301	86	8	1.4	86	0.70	1.7	0.010	9.1	295	12
402116110030801	5	0.1	3.5	38	0.60	0.70	0.020	0.002	8.0	191
402135110051901	5	0.1	3.1	39	0.60	0.50	0.030	0.002	8.7	205
402157110063501	90	56	41	540	5500	18	15	52	11800	1200
402246110061501	11	0.4	3.3	30	2.9	0.50	0.050	0.008	8.2	239
402319110025601	5	0.2	3.8	48	0.80	0.70	0.020	0.002	8.0	218
402326110034401	91	48	30	240	2900	22	12	78	7360	700
402507110051301	95	72	34	930	2500	58	21	58	7900	300
402541110011901	97	110	56	440	4400	14	5.7	18	11000	300

STATION NUMBER	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM, DIS-SOLVED (UG/L AS LI)	MANGANESE, DIS-SOLVED (UG/L AS MN)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	TRITIUM TOTAL (PCI/L)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL	S-34 / S-32 STABLE ISOTOPE RATIO PER MIL
401819110041601	140	170	22	10	290	--	-128.0	-18.25	--
401823109590401	60	30	33	3	14	--	-128.0	-17.39	--
401919109593201	70	53	43	6	17	--	-128.0	-17.58	--
401940110023601	120	440	29	9	150	--	-127.0	-17.33	--
401946110044601	50	95	15	15	410	--	-136.0	-18.32	--
401950109592501	23000	330	6700	360	8800	0.8	-54.3	0.41	43.10
402114110003301	110	220	53	3	210	<0.3	-125.0	-17.01	--
402116110030801	30	200	26	22	390	--	-138.0	-18.61	--
402135110051901	20	730	26	14	290	--	-137.0	-18.59	--
402157110063501	11000	180	2800	310	11000	--	-53.5	0.60	35.00
402246110061501	60	1200	38	15	400	--	-136.0	-18.04	--
402319110025601	30	460	29	20	370	--	-135.0	-18.13	--
402326110034401	9100	60	1600	260	8400	--	-49.7	0.78	49.40
402507110051301	10000	220	1700	160	7600	--	-52.3	0.40	13.90
402541110011901	60000	310	8700	170	5900	--	-66.3	-2.39	48.30

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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<i>Area</i>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<i>Volume</i>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second
<i>Mass</i>		
ton (short)	$9.072 \times 10^{-1}$	megagram or metric ton

*Sea level:* In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.



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